



**PHD**

**The ego development stage of school leaders in England and its implication for practice**

Gilbride, Neil Mark

*Award date:*  
2021

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**The ego development stage of school leaders in  
England and its implication for practice.**

Neil Mark Gilbride

A thesis submitted for the degree of Doctor of Philosophy

University of Bath

Department of Education

January 2021

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## Abstract

School headteachers/principals (HT/Ps) are responsible for responding to wicked problems in complex organisations. The way they make sense of that complexity and the multifaceted problems that need to be solved is crucial for them and their organisations. In all adults, sense-making is undertaken by the ego. Loevinger's theory of adult ego development (AED) (Loevinger, 1966: Hy and Loevinger, 1996) describes how the functioning of the ego, and therefore sense-making, can shift through eight qualitatively different stages throughout the adult lifespan. These eight stages describe substantive differences in how adults interact with complexity, how they interpret multifaceted problems, how they interact with others, and how they work with their feelings. However, the way the AED stage of HT/Ps shapes their practice has not previously been the subject of study. Hence the rationale for the research reported in this thesis.

The AED stage of 20 HT/Ps was assessed using the Washington University Sentence Completion Test (WUSCT). HT/Ps in the Self-Aware, Conscientious and Individualist stages were identified. How HT/PS would typically comprehend and respond to critical incidents within their schools was collected from the HT/P and those that work closely with them. The common theme from HT/Ps within the same AED group as to how they comprehended and interacted with organisational complexity and to wicked problems were analysed.

There were substantive differences across the different stages of AED according to how HT/Ps: comprehended the complexity within their organisation; comprehended and responded to wicked problems; the role they gave others; how they processed feelings; and how those around them experienced the HT/P. The sense-making capability associated with later stages of AED appears to be advantageous in a range of ways. Based on these findings, I argue that this thesis and this novel data set offers several original contributions to theory, practice, and research methodology within educational leadership.



## List of Abbreviations

AED – Adult Ego Development

Ofsted – Office for Standards in Education

DfE – Department of Education, UK Government

HT/P – Headteacher/Principal

MO – Moral Development

C.E.L.L.S. – Complex, Evolving, Loosely Linked Systems (Hawkins and James, 2018).

CIT – Critical Incident Technique

## Chapter 1 Introduction

Headteachers/Principals (HT/Ps) are crucial to the successful running of a school. HT/Ps are responsible for their organisations across a range of domains - from financial security to pedagogical innovation (DfE, 2015; 2017). How HT/Ps organise themselves and others within these responsibilities is important: the HT/Ps' direct and indirect influence on a range of outcomes, including pupil attainment and teacher well-being, is well documented (Hallinger and Heck, 2010; Sun and Leithwood, 2012; Day, Gu and Sammons 2016; Skaalvik and Skaavik, 2010). Thus, how HT/Ps undertake the responsibilities they are given is a mechanism of influence, hence leadership, within a school.

HT/Ps face substantive challenges in undertaking their responsibilities. First, they have to make decisions in a context where many variables are interconnected. Furthermore, cause and effect can be hard to determine, new properties can arise through emergence, and it can be challenging to obtain a complete picture of the situation. In other words, schools are complex institutions and, because of the features inherent to complex organisations, they can be a challenging context in which to lead (Morrison, 2010; Hawkins and James, 2018). Driven in part by the complex nature of schools, many of the HT/P's responsibilities are essentially unique, involve a wide range of individuals, have no universal solution or accepted process to follow and have no mechanism to test a potential solution or agree when the problem is over. Rittel and Webber (1973) refer to such problems as wicked problems, and others have claimed that such problems are a prominent feature of school leadership practice (Leithwood, Begley and Cousins 1994; Wright, 2013; Bottery, 2016; Armstrong, 2017). Thus, in carrying out their responsibilities, HT/Ps have the challenge of comprehending and responding to wicked problems, within a context of complexity.

I argue that, if HT/Ps are to comprehend and act on the wicked problems they face in the complex contexts in which they work, they will need to undergo a specific psychological process called sense-making. Sense-making is the process by which individuals actively construct their understanding of a situation when there is no clear solution (Holt and Cornelissen, 2014) or when faced with events which are "*novel, ambiguous, confusing, or in some other way violate expectations*" (Maitlis and Christianson 2014, p.1). The outcome of this process provided a subsequent platform for action (Weick, Sutcliffe and Obstfeld, 2005). Given the wicked features and complex contexts of many of the HT/P responsibilities, and the vital role HT/Ps have in fulfilling these responsibilities, sense-making could be an important process for understanding how HT/Ps lead their schools.

Because of this need for sense-making in wicked problems and complex contexts, I argue Jane Loevinger's Adult Ego Development (AED) theory (Loevinger, 1976; Hy and Loevinger 1996) could be a useful framework to understand how HT/Ps navigate their responsibilities. My argument is based on two reasons:

1. AED theory gives a location and psychological explanation of sense-making. Loevinger (1976) argues that the ego is the central psychological construct which seeks to make sense of ourselves in relation to our environment.
2. AED theory maps out how the process of sense-making might differ between individuals. Loevinger hypothesised that the ego could exist in 8 substantively different stages of development (Hy and Loevinger, 1996). Within each developmental stage, there are fundamental differences in sense-making. Some of these features include: how individuals work to conceptualise the role of others; the extent by which they can observe complexity; and what they consciously seek in situations.

Therefore, given the role of AED in coordinating the sense-making processes required for HT/Ps to comprehend and act within the type of problems and organisations inherent within their role, AED stage could offer important insights into how an HT/P leads their settings.

This thesis reports research which aimed to analyse how HT/Ps of different stages of AED comprehend and respond to the complexity of school settings and respond to wicked problems within their organisations. The research questions were:

1. Are there substantive differences between HT/Ps who are at different stages of AED in a) how they conceptualise and work with complexity and b) respond to wicked problems within their organisation?
2. To what extent can these differences be linked to their stage of AED?
3. Is being in the post-conscientious stage of AED advantageous to HT/Ps in their leadership work in their schools?

Chapter 2 outlines the argument that a study of AED in HT/Ps could offer important and original contributions to knowledge and research methodologies within the field of educational leadership. Jane Loevinger's theory of AED (Loevinger, 1976; Hy and Loevinger, 1996) will be introduced as a robust psychological model of how sense-making can be substantially different according to an individuals' stage of AED. My subsequent analysis of literature from developmental psychology, general leadership and educational leadership research will suggest that there is a potential case for

considering AED as a central function in shaping a HT/Ps leadership practice within their school. However, the need for this research emerges in how no prior study has been conducted into HT/Ps and the relevance of their AED stage. Furthermore, previous attempts to explore adult development within leaders of other disciplines have several conceptual and methodological weaknesses. These limit the extent to which their findings can be generalised to the specific demands of HT/Ps. Thus, this section concludes that mapping how HT/Ps of different AED respond to their organisations and the tasks within them can offer original conceptual and methodological contributions to the field of educational leadership.

Chapter 3 provides a detailed account of how I conducted the multiple case study research design, underpinned by a critical realist research philosophy. These details include how I achieved a broad, balanced sample of 20 individual participants, how their stage of AED was assessed using the Washington University Sentence Completion Test (WUSCT) (Hy and Loevinger, 1996; Loevinger, 1998b) and how I collected and analysed responses to critical incidents that were wicked problems. The steps taken to ensure that the methodology was confirmable, credible, and dependable are discussed. These include several methodological innovations, such as the use of multiple tasks and individuals to triangulate findings, the design of critical incident tasks, remaining unaware of AED stage and a novel method for designing vignettes. I will also show how my work follows clear ethical guidance and data protection protocols.

Chapter 4 presents three case studies of HT/Ps of different AED stages and how they responded to critical incidents. These three case studies correspond to the three AED stages identified within the sample of 20 HT/Ps: The Self-Aware stage; the Conscientious stage; and the Individualist stage. Each case study reports on the consistent themes found across HT/Ps in a specific AED stage in respect to the following five domains: how they comprehend and respond to incidents that met the definition of wicked problems; the role of others; how they comprehended and interacted with feelings; how others experienced the HT/P; and their comprehension of complexity.

Chapter 5 discusses the results described in Chapter 4 in three sections. The first section of Chapter 5 reviews the research questions considering the three case studies presented in the previous chapter. When the three case studies are compared, there are substantive differences in a HT/Ps practice according to their stage of AED (Question 1). The themes of the individual stage case studies, as well as the patterns across the case studies, are reflective of the underlying AED theory (Question 2). Finally, I will use the main themes in school organisation and leadership from the literature review to indicate that post-conscientious AED stages might offer some advantages to

those who lead schools (Question 3). The limitations of this study are discussed. The size of the sample and the breadth of AED stages identified is recognised to affect the generalisability of the specific themes observed within each AED stage. Solutions to increase sample size and broaden out approaches to AED assessment are offered to improve future attempts within the field.

Subsequent sections of Chapter 5 will outline the original contributions of this thesis to knowledge, practice and methodology. As there had been no prior attempt to study AED in HT/Ps, this thesis offers original primary data in the form of the case studies. Furthermore, I argue that, based on these results, that AED could offer a new line of theoretical inquiry, as well as critical and original insights into previously established theoretical positions. Second, I will discuss how the advantages that later stages and what this means for how we conceptualise the challenging nature of headship and their professional development. Finally, I will outline the original methodological contributions to the study of leadership sense-making. These include my approach to documenting how HT/Ps respond to organisational problems and a novel method for developing hypothetical critical incidents and what this has to offer the field of research.

Chapter 6 offers a summary of the research findings from this thesis and the areas for further development for theory, research, and practice.

## Chapter 2 Literature Review

The structure of this literature review has three main sections. The first section will seek to explain the role of Jane Loevinger's AED model in sense-making (Loevinger, 1966; Hy and Loevinger, 1996). A description of sense-making will be offered, drawing on the work of Weick, Sutcliffe, and Obstfeld (2005), Holt and Cornelissen (2014) and Maitlis and Christianson (2014). I will then explain how Jane Loevinger's model of AED is a robust construct for understanding how the process of sense-making can differ substantively within individuals.

The second section will discuss how the stages within AED can offer insights into a HT/P's practice. First, I will discuss leadership as influence, and how an HT/P responds to their responsibilities can influence their organisations and the individuals within them. Using different discourses within the educational leadership literature, I will suggest that HT/Ps contend with the following four aspects within their responsibilities: comprehending organisational complexity; understanding and responding with problems that have no readily available solution and no stopping rule, otherwise referred to as wicked problems (Rittel and Webber, 1973); working with others, and recognising and interacting with affect. Within each of these four areas, I will discuss the relevance of Loevinger's AED theory, as well as the work of others who have applied adult development to general leadership practice, to argue two main points:

- 1) That AED could potentially shape how HT/P's comprehend and respond to organisational complexity, wicked problems, the role of others and affect.
- 2) That later stages of AED, starting at the Individualist stage, could offer some advantages in shaping how the HT/P comprehend and responds to their organisation, the problems and the individuals involved with them.

In the third and final section, I will summarise how a study exploring AED theory within a HT/Ps practice could offer original contributions to knowledge and methodology within the field of educational leadership.

### 2.1 Sense-Making and Adult Ego Development

#### 2.1.1 *Conceptualising Sense-Making*

Across the sense-making literature, there is a focus on how individuals interpret and comprehend situations. Weick, Sutcliffe and Obstfeld (2005) refer to sense-making as the process by which a

situation *“is comprehended explicitly in words, and that serves as a springboard into action”* (p. 40). Holt and Cornelissen (2014) describe sense-making as how individuals interpret a complex event, and how they use this interpretation to respond. Starbuck and Milliken (1988) describe the purpose of sense-making as the capacity to *“comprehend, understand, explain, attribute, extrapolate, and predict”* (p. 51). Thus, sense-making can be conceptualised as the process by which individuals comprehend a situation and begin to formulate the steps they will take in response.

The consensus across these definitions of sense-making is that such a process is enacted when individuals interact with a specific type of event or situation. Holt and Cornelissen (2014) refer to sense-making as occurring in situations which could hold a different meaning to different individuals. Ancona (2012) describes how sense-making is a process needed most when *“our understanding of the world becomes unintelligible in some way”* (p.4). Finally, Maitlis and Christianson (2014) describe sense-making as:

*the process through which people work to understand issues or events that are novel, ambiguous, confusing, or in some other way, violate expectations (p.1).*

In summary, sense-making is the process of comprehending and achieving an understanding of a relatively novel or ambiguous situation. From this brief review, I would suggest that sense-making is not a process that occurs during every problem. Instead, it is a process that occurs in a specific set of circumstances and context.

One such relevant context could be working in complex organisations. Complexity theory asserts that organisations are hard to predict, highly dynamic, interdependent with a challenging relationship between cause and affect (Morrison, 2002; Stacey, 2000; Hawkins and James, 2018). Furthermore, within such complex organisations, wicked problems are likely to be more common (Waddock et al., 2015; Peters, 2017). These problems have, amongst other features, no single right answer and might have multiple explanations (Rittel and Webber, 1973). Hence, in such organisations, some of the problems that a HT/P might face is likely to be ambiguous or unclear. The need for sense-making would likely be greater in such contexts. I return to these arguments in section 2.2.2 and 2.2.3 in discussing the relevance of sense-making within a HT/Ps practice.

Across several of the key definitions presented here, sense-making is a process that occurs when individuals cannot follow a flow chart or pre-determined procedure. Instead, individuals engage in

sense-making when the characteristics of the situation are novel, ambiguous and require thoughtful comprehension to respond.

### *2.1.2 What is Adult Ego Development?*

Ego is the central psychological construct that undertakes the process of sense-making within individuals. Jane Loevinger's Theory of AED (Loevinger, 1966; Loevinger, 1976; Hy and Loevinger 1996) will act as the framework for explaining: how the ego conducts this process of sense-making; the extent to which sense-making is differentiated within individuals; and how individuals develop throughout the lifespan.

#### Conceptualising the Ego

Loevinger's (1976) conceptualisation of the ego carries three main considerations.

- First, that the ego makes sense of the dynamic between an individual and their environment.
- Second, that the ego is the central master trait within psychological functioning.
- Finally, that the ego can mediate the actions of an individual.

Loevinger conceptualised the role of the ego as a central organiser in making sense of the dynamic between an individual and their environment. Loevinger claimed to have based her work on that of Harry Stack Sullivan, an interpersonal psychologist who identified the role of the ego as making sense of the interaction between external/cultural forces and the 'self' system, (Sullivan et al., 1968; Evans, 1996). Manners and Durkin (2000) concurred with this notion of the ego. In their analysis of AED theory, they described the role of ego was to integrate the internal (intrapersonal) and external (interpersonal) processes in producing a consistent and stable world view. This notion of the ego as a central organiser is consistent with other ego psychologists. Freud (1961) describes how the ego organises our experience through mediating between our unconscious drivers (held within the id), the ideal self (super-ego) and demands by the external environment. Erikson (1956) also followed in this frame, noting how the ego faces crisis within their psychosocial environment, in which the egos' role is to comprehend and make sense of its environment. Thus, it is for this reason that the ego is theorised as a central organiser, making sense of interplay between the individual and their environment.

Loevinger also theorised that, because of its central role in psychological functioning, ego serves as the "*master*" trait (Loevinger 1966, p. 205). This central role manifests itself in two ways. First, that



the ego is responsible for a broad range of different functions. These functions include the role of other individuals in sense-making, the extent to which people can perceive complexity and how people interact with rules and internal values (table 1). Cummings and Murray (1989) agree with this observation. For them, AED stages encompass “*the total human organism, including moral and personality development, cognitive complexity and interpersonal style*” (p. 21). Second, Loevinger hypothesised that the ego mediates the expression of other internal constructs, such as personality and moral judgement and the subsequent influence they have on the sense-making process (Loevinger, 1966). In this conceptualisation of the ego, through its central sense-making function, the ego coordinates and mediates with a range of different psychological constructs as a master trait. I discuss this further on in this section.

The third key consideration is the role of the ego in mediating their response to the environment. The ego has been described as conducting this role in two ways – directly and indirectly. In having a direct influence over behaviour, Westerberg, Blasi and Cohn (1998) comprehend the ego as the construct which influences how individuals interact with the world around them. Loevinger recognised that behaviour, as well as the perception and interpretation of the information resulting from said behaviour, will be mediated by how the ego constructs their understanding of reality (Loevinger and Wessler, 1970). Others have described how the ego can also shape behaviour indirectly through its relationships with other psychological constructs that influence how we process and interact with others. These constructs include general cognition (Novy and Francis, 1992; Cohn and Westenberg, 2004), emotion (Hauser, 1993; Mayer and Salovey, 1995) as well as the influence of ego on personality (Costa and McCrae, 1993) and moral judgement (Kohlberg, 1984). Thus, the perceived role of the ego in mediating these constructs suggests that ego plays an important role in determining how an individual responds and interacts with their environment.

Loevinger’s conceptualisation of the ego can be summarised as follows. The ego is a central psychological construct that actively makes sense of internal and external demands. Through this process, the individual can come to comprehend the situation and their place within it. This process subsequently can shape an individuals’ response, and this includes behaviour.

### A Description of Ego Stages

A major point of differentiation of Loevinger from other ego theorists was her concept of the ego moving through specific stages of development. According to Loevinger, the ego can reside in one of eight, hierarchically organised, stages. These stages range from the Self-Protective as the first stage,

to the final Integrated stage (Hy and Loevinger, 1996). Each stage of AED represents substantial differences in individual sense-making. Manners, Durkin and Nesdale (2004) described how changes in AED are associated with a broad range of factors, including: increased personal and interpersonal awareness; autonomy; interpreting complexity; and an enhanced capacity to self-regulate. Hy and Loevinger (1996) described the differences in ego stages according to four domains:

- **Impulse Control:** Whether rules or internal standards dominate how they regulate their behaviour.
- **Cognitive Style:** The extent that individuals perceive the external environment as complex.
- **Interpersonal Relations:** Defined as the role of others within an individuals' sensemaking.
- **Conscious Preoccupations:** What an individual will prioritise in comprehending themselves in relation to their context.

I will now summarise the general pattern of development across the stages within each of these four domains.

### *Impulse Control*

From the Conformist stage onwards, individuals begin to control their impulses through reliance upon external systems such as rules (Kegan, 1982; Hy and Loevinger, 1996). Within the Self-Aware stage, an emerging self-awareness drives an individual to consider how the rules could be applied as opposed to followed blindly (Snarey, Kohlberg and Noam, 1983; Hy and Loevinger, 1996; Lanning et al., 2018). In the Conscientious stage, there is an important transformation. Driven by an increased ability to reflect, individuals control their behaviour and decisions through their own self-evaluated standards and will seek to uphold these consistently (McAdams, 1998; James, James and Potter, 2017). When the Individualist stage and beyond is reached, individuals try to balance between their internal standards and the external rules – starting with tolerating conflict between the two at the Individualist stage, to being able to cope with this conflict in Autonomous stage (Hy and Loevinger, 1996; Pfaffenberger, 2011).

### *Cognitive style*

As individuals move from one stage to the next, they recognise an increasingly complex world. Individuals move from a linear model of reasoning in the Conformist stage, to appreciate the possibility of multiple causes/ideas within a given context in the Self-Aware stage (Hy and Loevinger, 1996). Beyond the Self-Aware stage, there is an increasingly complex world view that incorporates

multiplicity and patterns (Conscientious stage). Within the Individualist stage, there is a tolerance for contradiction, paradox, and ambiguity (Hy and Loevinger, 1996; Blasi, 1998). For example, individuals become adept at reconciling two opposite constructs. Basseches describes this process (1984) as dialectical thinking. Also, there is a recognition that process and the outcome are not necessarily related and that no process can predict a set outcome (Cook-Greuter, 1999; Harney, 2020). The pattern of development, therefore, is clear: between stages, there are substantive changes in the degree of complexity that individuals can comprehend.

### *Interpersonal Style*

Individuals move within three broad phases in relation to interpersonal style. The first phase is the independent frame: Up to, and including, the Conformist stage, an individual's own needs and interests drive the purpose of their interactions (Hy and Loevinger, 1996). At the Self-Aware stage, individuals move to the dependent frame, when interactions become increasingly focused on helping others. This dependency hits its peak at the Conscientious stage: what is an attempt to be helpful at the Self-Aware stage, becomes an intense responsibility for others (Hy and Loevinger, 1996). Moving into the Individualist stage marks movement into the inter-independent phase. The inter-independent phase is characterised by an increasing recognition of mutuality, and the need to balance their needs with others (McCauley et al., 2006).

### *Conscious Pre-occupations*

Conscious pre-occupations can be conceptualised as what people typically focus on. The general trend in conscious pre-occupation is a movement from concrete, observable qualities to increasingly abstract foci. For example, individuals within the Conformist and Self-Aware stages prioritise concepts, ideas and thoughts that are most readily accessible, such as feelings and appearance (Hy and Loevinger, 1996). In the Conscientious stage and beyond, there is a growing interest in abstract qualities. These include causality and the development of others (Cook-Greuter, 1999). Thus, the general trend throughout the stage model is from concrete, observable qualities, to inner abstract qualities.

Table 1 summarises each of these four domains. Although there are eight stages of development, I omitted the Impulse and Self-Protective stages. These stages are predominantly found within childhood and therefore unlikely to be relevant to a study of adults. I also omitted the Integrated as it is criticised for the lack of evidence to support its existence (Cook-Greuter, 1999).

<u>Stage of AED</u>	<u>Conscious Pre-Occupation</u>	<u>Impulse Control</u>	<u>Interpersonal Style</u>	<u>Perception of Complexity/Cognitive Style</u>
<b><u>Conformist</u></b>	Appearance. Overt behaviour. Social acceptability.	Rules are to be respected and followed. Shame for breaking the rules.	Co-operative, loyal. People thought of in opposites – right/wrong; liked/not liked; good/bad.	Simplicity in how they conceptualize information – through cliché. Rules are absolute truths.
<b><u>Self Aware</u></b>	Feelings. Problems.	Exceptions to the rules are allowed, but rules still dominate.  Guided by growing Self-Awareness of self and their values.	Helpful. Emerging Self-Awareness in relation to the group. Emergence of supporting others as important.	Recognition of multiple possibilities. Behaviour has reasons. Recognition of general differences in perception
<b><u>Conscientious</u></b>	Motives. Traits. How feelings can differ in individuals.	They are governed by self-evaluated standards of what they feel is right.  Self-Criticism.	Feeling of intense responsibility of others. Interest in discussing the unseen – thoughts, feelings and abilities of others. Awareness of individual differences. Growing awareness of emotion.	Conceptual complexity emerges: many possibilities within a situation, starting to see networks. Compare and contrast different ideas from within themselves. Empathy begins to emerge.
<b><u>Individualist</u></b>	Development of themselves and others. Individuality.	Tolerance for difference/conflict between the external and internal environment.  Respect for individuality.	Individuality is respected, and the emergence of mutuality from before is growing further. Interpersonal interaction is complex – influencing how they communicate emotions and feelings. Can accept other people think and behave differently. The growth of mutuality – respect for individuals' autonomy.	Distinction of process over outcome. Complexity in full emerges: Tolerance for ambiguity emerges. Behaviour is seen as caused by complex mechanisms. Emergence of dialectical thinking– ideas that appear opposites being brought together. Appreciation of different perspectives of others.
<b><u>Autonomous</u></b>	Psychological causation. Self-Fulfilment.	Coping with conflict- Growing from tolerance to being able to cope with internal values and those placed by the external environment.	Establish interdependence. Respect for autonomy.	Further conceptual complexity: Higher tolerance for ambiguity. Coping with external and internal demands fluently. Further developments in dialectical thinking.

*Table 1 Summary of the Conformist, Self-Aware, Conscientious, Individualist and Autonomous Stages of Adult Ego Development (Adapted from Blasi, 1993; Hy and Loewinger, 1996; Westenberg, Blasi and Cohn, 1998; and Manners, Durkin and Nesdale, 2004*

Within AED theory, Loevinger also developed a test which can determine an individual's stages of AED. The Washington University Sentence Completion Test (WUSCT) is a psychometric test and comprises of 36 individual, incomplete sentences (Appendix 1). Participants complete the sentences, without restrictions on size of response or time taken to respond. Qualified scorers then assess the responses against the WUSCT Manual (Hy and Loevinger, 1996). Participants are assigned a score, which determines an individual's stage of AED. More detail on this psychometric assessment can be found in Section 3.6.1.

In summary, this section highlights several features found across the stages Loevinger's AED stages. First, each stage describes many different aspects of the way individuals interact with their environment and the individuals within it. Second, by incorporating such breadth within the stages, claims that the ego is the central organiser are justified. According to the stage summaries, the process of sense-making by the ego accounts for the way individuals relate to others and to the extent of complexity that individuals can comprehend. Thus, the ego has a central role in the individual's psyche because of the way it provides breadth in the sense-making process. Furthermore, the ego can be described as an organiser through its role in processing a wide range of insights, which can then act as a bridge to thoughts, feelings and behaviour. Finally, the sizeable differences between stages have been highlighted. Each stage incorporates a substantively different way in which individuals conceptualise and respond to their external environment. Each stage represents important differences in how an individual makes sense of the world which, in turn, will shape how individuals respond to situations and interact with others.

### Validity of Loevinger's Ego Stage Model

Loevinger's model of AED rests on two key claims.

- 1) That AED plays a central role in psychological functioning.
- 2) An individual's stage of AED can move through these stages throughout the lifespan.

I will now analyse the evidence behind both claims and use this analysis to justify why I have selected Loevinger's model as the theoretical lens for sense-making in this study.

#### *Support for the Notion of Ego as a Central Trait in Psychological Functioning.*

Loevinger claimed that the ego plays a central role in psychological functioning. This claim is supported through the evidence that ego incorporates four different aspects of sense-making - cognitive style, conscious preoccupation, impulse control and interpersonal style. Also, the claim of

centrality within an individual's psyche is supported by the type of statistical relationships that the ego has with other psychological constructs. Combined, I will argue that Loevinger's claims are grounded in sufficient evidence.

First, the content of the stages outlined in table 1 are broad and is supported by subsequent third-party analysis. The four domains of ego are broad – they encompass how we think through problems (cognitive style), what we attend to (conscious preoccupation), how we respond to our own values and external rules (impulse control) and how we relate to others (interpersonal style). Novy et al. (1994) demonstrated that the ego, as conceptualised by Loevinger, encapsulates these different domains within one construct. They used structural equation modelling to compare four potential models of ego. They found that the structure that best fitted the responses of 267 respondents was a single underlying factor, the ego, that linked these four domains (cognitive style; impulse control, conscious preoccupation; and interpersonal style). Manners and Durkin (2000) review of AED concluded that AED incorporates different aspects of psychological functioning, including cognitive functioning, self-awareness, awareness of others and personality. Westenberg, Hauser and Cohn (2004) review of AED included construct validity and concluded: *"findings of over 350 empirical studies generally support the critical assumption underlying the ego development construct"* (p. 485), which include the broad array of different psychological functions within AED. Finally, Loevinger's stage model could differentiate substantive differences in the content of 44,000 responses to the WUSCT, which included cognitive, social and moral components (Lanning et al., 2018). Thus, the ego itself can be considered central due to the broad array of factors that, as suggested by the evidence presented, can be considered as part of the ego's functioning.

Second, it would appear that the relationships that ego shares with other psychological constructs supports the claim that the ego has a central role in psychological functioning. As a central construct, there should be some degree of correlation between other core psychological constructs. I would argue that such a correlation should be:

- Small. A small correlation would recognise that, whilst it interacts with other psychological constructs, the ego is still an independent entity.
- Observed across a diverse set of different psychological constructs. As a central trait, I would argue that these interactions, or small correlations, would need to occur across a range of different constructs if it is to be a central part of an individuals' psyche.

Analysis suggests that there is evidence for a range of low correlations across different psychological constructs and the ego. These include intelligence, personality and moral reasoning.

There is a small correlation between AED and intelligence. Intelligence, according to Neisser et al. (1996) can involve the following aspects:

*Ability to understand complex ideas, to adapt effectively to their environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought (p.77).*

Loevinger (1979) observed that, in 10 out of 15 studies, there was a low-to-moderate correlation between intelligence and AED (between 0.14 and 0.46). Furthermore, Cohn and Westenberg's (2004) meta-analysis found a .32 (95% CI, 0.28, 0.35) correlation between general intelligence and AED (2307 participants from 25 samples). This study also demonstrated that ego interacted with 94% of specific expressions of intelligence, such as emotional understanding. Thus, in both meta-analysis, intelligence and AED remained independent constructs whilst sharing a low correlation. Critically, the ego's interaction across a range of aspects of intelligence further reinforces the potential ego as holding a central role in processing.

A similar correlation exists between AED and personality. Personality has many different definitions, but most of the work comparing AED to personality uses the Five-Factor Model of Personality (also referred to as The Big Five), which is a psychometrically robust personality profile. In the Five-Factor model, personality is assessed across five domains: Openness, Conscientiousness, Extroversion, Agreeableness and Neuroticism (McAdams, 1992; 2015). York and John (1992) found that they could match expressions of personality across the five factors to AED (conscious pre-occupation, cognitive style, interpersonal style and impulse control) if the eight AED stages were condensed into three broader phases (Pre-conventional, Conventional and Post-Conventional). Later attempts to match an expression of personality to each AED stage were unsuccessful (John, Pals and Westenberg, 1998). York and John's (1992) success in establishing these ego-personality groups demonstrates that there is a small conceptual overlap between AED and personality. This overlap is consistent with the notion of the ego being a central organiser. While personality and ego will interact, with the potential for the ego to mediate expression of personality. However, because John et al. (1998) could not replicate the eight AED stages within the personality, we can be more confident that personality and AED are independent constructs.

Finally, AED also has low correlations with moral development. Kohlberg's theory of moral development (MD) focuses on the development of an individual's ethical behaviour (Kohlberg, 1984). The maintenance of only a low correlation with moral development is particularly interesting, given the conceptual overlaps between Loevinger and Kohlberg models. For example, in both Loevinger's Conformist AED stage and Kohlberg's third MD stage, individuals would use external rules as the guide for what to determine as morally appropriate course of action (Lee and Snarey, 1988). In the Conscientious stage, or stage 6 of Kohlberg's MD model (1984), both sets of individuals would refer to their own internal rules in determining a course of action. Despite this clear-cut overlap, Blasi (1976) found there was only a low correlation between AED and MD measures. Furthermore, despite Lambert (1972) finding a correlation between AED and MD, this was only where the content between Kohlberg and Loevinger's stages overlapped. Snarey (1998) also recognised that, while there is a developmental pattern between moral judgement and AED, that they remain independent. Kohlberg (1984) had earlier confirmed that MD was considered a separate factor within an individual's AED. Thus, there is a small relationship between AED and MD that fits with the notion of AED as a central organiser.

In this section, I have discussed how there is support for Loevinger's conceptualisation of ego as having a central role within psychological functioning. First, there is support that AED stages incorporate a range of different ways which shape how individuals comprehend and respond. Second, the similar relationship that ego has with such a broad range of psychological constructs, from how we express ourselves to conceptions of morality, lend support to the hypothesis that ego is the central construct in an individual's psyche. It is Loevinger who then hypothesises that, with such centrality, it is possible to justify ego's position as an organiser; bringing together a disparate set of ideas and traits to form a sense-making position.

### *The Development of the Ego Throughout the Life Span*

A foundational part of AED theory is that the ego can develop through the lifespan. Loevinger (1976) asserted that the ego could develop through eight stages, with some stages being more predominant at certain ages than others. In this section, I will outline how such development occurs and the evidence for these claims.

The way individuals can move through AED stages conforms to certain maxims. These principles derive from Piagetian constructivist principles (Piaget, 1957).



- Understanding and operating at later stages is not possible until the individual has passed into that later stage. Stages cannot be bypassed or skipped. Individuals move through these stages in a step-by-step fashion. It would not be possible to move from Self-Aware stage straight to the Individualist stage. In this example, for an individual to progress to the Individualist stage, the Conscientious stage must first be achieved.
- Once an individual has progressed to a subsequent stage, the previous stage and its learnings remain within them. It is, therefore, possible for individuals to revisit, or temporarily regress, into earlier stages.
- Stages are discrete. Individuals cannot be in different stages for different domains. For example, it would not be possible for an individual to be at the Conscientious stage for cognitive style and Self-Aware for impulse control.

There is evidence that the ego can develop across the life span. A study of the inheritance of AED has demonstrated the potential for AED growth, with a significant level of variance in AED which can only be explained by adult experiences (Newman, Tellegen and Bouchard, 1998). Furthermore, research exploring the impact of disruptive experiences would appear to provide stimuli for discussion and reflection that can promote AED. These disruptive, or dis-equilibrating, experiences are different enough from an individual's day-to-day experience to promote an internal conflict. Some of these adult experiences which have induced AED include parents discovering their child has a long-term health condition (King et al., 2000) and divorce (Lilgendahl, Helson and John, 2013; Helson and Roberts, 1994). These conflicts can force individuals to reconsider their underlying approach and, consequently, advance in their stage of AED (Manners and Durkin, 2000; Manners, Durkin and Nesdale, 2004).

Several models of professional development have also observed the role that disruptive experiences can play in AED. Kegan and Lahey's immunity to change model (Kegan and Lahey, 2009) posits that these disruptive experiences provide the stimuli for reflection on underlying assumptions to a problem. This observation was also evident in Drago-Severson's (2004; 2012) model for promoting adult growth within educators. Through collegial enquiry and mentoring, individuals are exposed to other points of view, with the intention that this disruption could promote growth. Baron and Cayer (2011), utilising techniques such as the Bohm dialogue, suggested part of the reason for their success in developing post-conscientious development was:

*facilitated by contact with peers who are grappling with similar difficulties and who, as a group, can fulfil the functions of a holding environment. (p.358).*

Research into formal leadership development programmes, such as those described in Manners, Durkin and Nesdale (2004) shows that such programmes can bring about increases in AED. Vincent, Ward and Denson (2013) also observed AED growth in 335 adults over a 10-month development programme, based upon the approach of Manners, Durkin and Nesdale (2004). These studies would indicate that AED is possible in adult populations, within the confines of a development programme that either uses specific types of learning approaches or provides challenging experiences.

However, stage development within adults is not a universal experience. Some argue that that ego remains static in later adulthood and only saw growth in early adulthood (McCrae and Costa, 1980; Loevinger et al, 1985; Cohn, 1998). Furthermore, development beyond the Conscientious stage appears to be particularly challenging. This point is evident in demographic studies, which highlight the rarity of individuals occupying later stages. For example, Cook-Greuter (2004) observed that many adults do not move beyond the Conscientious phase (circa 85%). Also, Lanning et al. (2018) also observed that only 6% of a 4,500 sample were identified in the Individualist stage and beyond. Intervention studies also confirm the challenges of developing beyond the Conscientious stage. King et al. (2000) found that the link between high accommodative processing promoting AED only applied to individuals at within the Conscientious stage and earlier. In the intervention studies of Vincent, Ward and Denson's (2013) and Manners, Durkin and Nesdale (2004), development to more mature stages was more common for individuals moving into the Conscientious stage, and less so for individuals moving into Individualist stages. Hence, although development is possible, there are questions over whether such development is more challenging at specific chronological ages or AED stages.

In summary, AED is possible throughout the life span. Specific approaches to adult development can promote stage development. However, it would also appear that AED is not a universal experience and that development into later stages is not part of typical adult development. Furthermore, specific conditions need to be met to promote AED. These include disruptive experiences, within a structured and supportive learning approach.

### ***2.1.3 Summary***

In this section, I have discussed the role that ego as the central organiser of the way individuals make sense of themselves and their external reality. Furthermore, I have attempted to show how an individual engages in the sense-making process will differ substantially according to their stage of AED. The validity of AED stages and the way the ego can develop throughout the lifespan has been

discussed. In summary, AED provides a robust model with which to explore individual differentiation within sense-making while also factoring in the potential for individuals to grow and develop their capacity.

Now that I have established the validity of the main concepts underpinning AED, I will now establish the case that AED could offer new insights into how HT/Ps lead their organisation.

## 2.2 Headteachers/Principals and the Relevance of Adult Ego Development

### 2.2.1 Introduction

In this section, I will discuss the relevance of AED for HT/Ps and the domain of educational leadership. First, leadership will be conceptualised as a process of influence and that how a HT/P's undertakes their responsibilities is a form of influencing activity. I will then discuss the role of HT/P in England, arguing that HT/Ps have a wide range of responsibilities within their organisations. Consequently, how they enact their responsibilities can have a wide-reaching influence on the school and the individuals within them.

Critically, in conducting these responsibilities, I will argue that HT/Ps face two substantive challenges that will require them to engage in sense-making: organisational complexity (Hawkins and James, 2018; Morrison, 2002) and wicked problems (Rittel and Webber, 1973). These challenges also place demands on how HT/Ps work with others and in their role in recognising and responding to mood, feelings and emotion. I will attempt to elicit how the considerable differences across the sense-making of different AED stages could have a substantive impact on how HT/Ps operate in relation to their responsibilities and consequently, how they lead their organisations.

### 2.2.2 Conceptualising Educational Leadership

Leadership is generally considered to be the process of influencing individuals, teams or organisations. Northouse (2016) refers to leadership as *"a process whereby an individual influences a group of individuals to achieve a common goal"* (p.6). Yukl (2002, p.3) notes that:

*most definitions of leadership reflect the assumption that it involves a social influence process whereby intentional influence is exerted by one person [or group] over other people [or groups] to structure the activities and relationships in a group or organisation.*

The OECD (2001) review of public sector leadership noted influence as the defining idea behind leadership. Cuban (1988) states that: *“Leadership...refers to people who bend the motivations and actions of others in achieving certain goals”* (p.193). Within educational leadership, influence also dominates as the key idea in considerations of leadership. Leithwood, Jantzi and Steinbach (1999) concluded that the consistent idea amongst different theories of leadership was the concept of influence. Connolly, James and Fertig (2017), concur in their conclusion of educational leadership: *“educational leadership is the act of influencing others in educational settings to achieve goals and necessitates actions of some kind”* (p.504). Thus, across leadership and management theory, the concept of influence is commonly recognised.

How a HT/P undertakes their responsibilities within a school entails acts of influence. By ensuring that the key focus of a school is adhered to (i.e., learning) one could argue the role involves taking *“responsibility for the proper functioning of a system”* (Connolly, James and Fertig 2017, p.505). Connolly, James and Fertig (2017) go on to state that *“When those carrying a delegated responsibility act in relation to that responsibility, they influence and are therefore leading.”* (p.504). Several studies on the efficacy of HT/Ps continue to point to the role HT/Ps play directly and indirectly influencing a range of organisational outcomes: these include student results on terminal examinations (Hallinger and Heck, 2010; Sun and Leithwood, 2012; Day, Gu and Sammons 2016), staff well-being (Skaalvik and Skaavik, 2010; Skaalvik, 2011) and staff professional learning (Timperley and Robinson, 2001; Robinson and Timperley, 2007). Therefore, how the HT/P enact their responsibilities is an important act of influence within schools.

### ***2.2.3 The Role of the Headteacher/Principal in England***

The list of responsibilities that HT/P can influence is expansive. The Department for Education (2015) have claimed that the Headteacher occupies an *“an influential position in society”* (p.4). Within their position, the DfE’s standards for the National Standards of Excellence for Headteachers (DfE, 2015) and the National Professional Qualification for Headship (DfE, 2017) outlines the substantive responsibilities that HT/Ps are required to undertake:

- Ensure safeguarding and pupil welfare, including behaviour.
- Financial management.
- Evaluate student achievement and teaching and learning.
- Promote and secure student outcomes.
- To actively work to reduce disadvantage because of student’s backgrounds.

- Provide teacher development and manage teacher workload.
- Through curriculum, support the development of student's cultural values.
- Playing an active role in the local community.

The Academies Act (2010) has extended several of these responsibilities further, as well as adding new responsibilities. Some HT/Ps are now also responsible for determining:

- Teachers pay and conditions.
- The curriculum.
- School catchment area.

More contemporary circumstances exemplify the challenges that HT/Ps face in enacting this comprehensive list of responsibilities. For example, within responses to the COVID-19 pandemic, HT/Ps have been given autonomy to determine curriculum, modes of delivery, and health and safety, in response to the temporary closure of schools in England (DfE, 2020a). The consequences of school closure have negatively impacted on pupil's academic progress (Education Endowment Foundation, 2020), educational disadvantage (Sutton Trust, 2020), pupil well-being (Lee, 2020), and even child malnutrition (Fore et al., 2020). What is clear from this situation is this: HT/Ps have vital roles in their community, and COVID-19 pandemic has exemplified that the way they undertake the responsibilities within their role has considerable influence on the children, families and communities in their care.

Beyond the day-to-day responsibility of the school and its pupils, HT/Ps can now hold a broad set of roles within their setting which extends their responsibilities further. Under the Academies Act (2010), HT/Ps can elect to form multi-academy trusts or federations, extending their responsibilities to multiple settings. Schools can now apply to run teacher training programmes (DfE, 2019), and thus HT/Ps can also be responsible for teacher recruitment and initial teacher training. Through their involvement in Teaching Schools and Research Schools, HT/Ps also have a role in the dissemination of best practice within their school and beyond (DfE, 2020b).

This section raises two key points about the role of the HT/P:

- 1) How a HT/P enacts their responsibilities will influence their organisation and is thus an act of leadership.
- 2) HT/Ps will have a large scope for influence within a school and beyond due to the wide range of responsibilities that they have within their role. These responsibilities include issues that

are specific to educational organisations (e.g., teaching and learning and pupil welfare), and public sector organisations (e.g., contributions to society). The scope of an HT/Ps' responsibilities, and hence the potential scope for influence within their settings, is considerable.

Thus, studying how HT/Ps lead through enacting their responsibilities within their schools is an important focus within the study of educational leadership.

In the following section, I will argue for the relevance of AED in offering unique contributions to understand how HT/Ps enact their wide portfolio of responsibilities and, consequently, how they lead their schools. First, I suggest that HT/Ps have to contend with the four following aspects within the responsibilities they face. Two of these are:

- Comprehending organisational complexity.
- Comprehending and responding to wicked problems.

Two other domains emerged as strong features from the analysis of the HT/P's responses within this thesis. Subsequent research and analysis would also demonstrate that these domains are critical aspects of how HT/Ps engage others within these responsibilities and how they influence within them. Therefore, instead of incorporating them into how HT/Ps comprehend and interact with wicked problems, I decided to treat them as separate themes. The themes are:

- How HT/Ps work with others in their organisations.
- How HT/Ps comprehend and interact with the affect.

I will show that AED has the potential to offer substantive and original insights into how HT/Ps engage with these four challenges, which in turn will affect how they undertake their responsibilities as an HT/P within a school.

Over the next four sections, I will analyse each challenge and the potential relevance of AED. In each section, I will first provide a clear conceptualisation for each of these challenges. Then, with reference to the literature on educational leadership and management, I will explain how each challenge is highly relevant for an HT/P's leadership practice. Next, using research from the domains of adult developmental psychology and leadership studies, I will discuss how individuals in different AED stages could comprehend and interact differently with each challenge. I will then summarise by drawing on the key hypothesis to have emerged from this analysis.

As so few studies within leadership have made use of the WUSCT for assessing AED, I have had to rely on research that have made use of other methods for assessing AED Stage. These include:

- The subject-object interview (Lahey et al, 2011).
- Rooke and Torbert's (2005) action logics tests – the Leadership Development Profile (LDP) and the Global Leadership Profile (GLP).

Some argue that due, to the similarity between the underlying theory of the WUSCT and LDP/GDP (Cook Greuter, 2000; McCauley et al. 2006; Manners, Durkin and Nesdale, 2004), that such results can be considered comparable. Therefore, on balance, I felt that amalgamating the findings from different assessment tools could provide greater insight into how AED stages have been applied to leadership to date. However, I will later argue that inherent weaknesses within the action logic assessment itself is a reason for using the WUSCT assessment for research within this field (section 3.6.1).

#### ***2.2.4 Comprehending Organisational Complexity***

HT/Ps are required to fulfil their responsibilities in complex settings. Complexity will first be conceptualised through the lens of complexity theory. Then, using insights from adult development, education and leadership research, I will discuss how HT/Ps of different AED stages could potentially recognise and work within such complexity in substantially different ways.

##### **Conceptualising Complexity**

Complexity theory is the construct I will use to conceptualise the complexity observed within school organisations. Complexity theory has developed through many different disciplines – evolutionary biology, economics, systems theory and organisational behaviour (Lewin, 2000). As a theory, it provides a set of principles/rules that explain the structure and organisations of systems and how they operate.

Rind (1999) defines a complex system as *“one in which there are multiple interactions between many different components”* (p. 105). These parts could be people or objects that could be connected in multiple ways that are not always readily apparent (Lewin, 2000). It is the interactions between different parts of the system (Marion, 2008) as well as between a system and its environment (Chan, 2001) that stimulates the emergence of new events/objects within a system. It is this emergence which promotes the re-shaping, or evolution, of the wider system within its environment.

One of the main contributions of complexity theory to organisational theory has been the concept of complex adaptive systems. Holland (1992) defines such a system as complex due to the high number of interactions, and adaptive as this system can change in response to its environments. Table 2 is a summary of the key features of a complex adaptive system.

<b><u>Feature of Complex Adaptive System</u></b>
Self-Organisation. Elements within the system will organise as how to best respond to the environment. In this way, the systems and those within them co-evolve.
Small actions can lead to consequences beyond the initial scope of the change/intervention. Equally, large-scale change might have no significant impact on the organisation.
Degree of unpredictability through emergence; outcomes and consequences within a system can emerge from the actions taken within the system. Emergence consequently makes it relatively difficult to predict and can impact on the shape of the system going forward.
Nested Systems. To extend the concept of interdependence, all systems are embedded within another system.
Interdependence. No part of the system can be isolated because all parts of the system can impact upon others.
Systems and environments co-evolve. Systems adapt to the needs of the environment, and the changes in the environment can stimulate changes within the system.
The system has a history, and this history cannot be forgotten. Instead, the history will shape the next stage of the system's evolution. What has come before will influence how the system evolves next.
Dynamic interaction between several elements. No relationship is linear/one-way. Instead, each factor within a relationship can influence the other.

*Table 2 Features of Complex Adaptive System. Compiled Using Descriptors from Holland (1992: 2006) Dooley (1997), Schneider and Somers (2006) and Palmberg (2009)*

### **Complexity and Educational Leadership**

Schools are an example of a complex, adaptive system. Morrison (2002; 2010) states that schools exhibit several features of complex adaptive systems, including: non-linearity; evolving; many parts which interact; and self-organisation. Hawkins and James (2018) have developed a theoretical perspective for complexity theory within educational organisations, which describes schools as C.E.L.L.S., which stands for Complex, Evolving, Loosely Linked Systems. C.E.L.L.S are defined by Hawkins and James (2018) as follows:



- Complex. Complexity theory suggests that organisations (and organisational life): is hard to predict; will self-organise; will have emergent properties; with no link between event size and outcome and there are interactions throughout and outside the organisation beyond the traditional hierarchy.
- Evolving. As the organisation is loosely linked to the ever-shifting world, the organisation is either moving forward, i.e., evolving or becoming increasingly less relevant.
- Loose-Linking. Everything is inter-independent. While one department, or faction, is separate from each other, the choices of one will have an impact on the other.
- Systems. Everything within the organisation is connected.

For example, the interconnection between student recruitment, budgets and student outcomes demonstrates several features of complexity. In recruitment, schools compete for students as parents have the right to choose which school their child should attend (Gibbons, Machin and Silva, 2008; Ball, 2008). The first two features of complexity that can be demonstrated in this context is the high degree of interactivity (Rind, 1999) and how schools are loosely linked (Hawkins and James, 2018). The socio-economic background of the student intake can have a large affect on the school's eventual outcomes (West, 2007; Gorard and Siddiqui, 2019). This relationship demonstrates interactivity. How the decisions of one school's recruitment policy can affect a distal factor such as school outcome. Furthermore, because schools receive funding for children on a per-pupil basis (DfE, 2019), the success in recruitment for one school could impact on both roll and operational budget of its local counterparts. Hence, different parts of the school system can be shown to be loosely-linked and interact considerably in how one factor, such as an individual school's recruitment, can affect other schools' operational budget and student outcomes.

Yet, the impact of recruitment on budget and income can scale up to impact the wider organisation. This observation demonstrates another feature of complexity described by Turner and Baker (2019) as the butterfly effect: having larger and wider consequences than the initial input. In this example, student outcomes (which are already affected by a schools' recruitment decisions), can affect the rating schools receive from Ofsted (Ofsted, 2019). This rating from Ofsted can determine whether special external interventions are required (Ofsted, 2019), right up to their involvement in teacher training (DfE, 2015) and ability to acquire lucrative system-level responsibilities (DfE, 2020c). Furthermore, both Ofsted grades and performance data play a significant role in parental choice (Allen, Burgess and McKenna, 2014). Thus, the smaller actions taken in the recruitment of students

from five years previous can have larger consequences going forward for the organisation and individuals within it.

Others have demonstrated that the principles of complexity theory are relevant for understanding a range of school issues. Morrison (2002) discusses how school leaders need to understand the micropolitics of relationships and interactions within of informal groups due to the self-organising nature of complex systems. Trombly (2014) argues that school reform cannot be imposed, or individual solutions transplanted from other contexts, due to emergence within complex systems and the importance of prior history in shaping the system. Woods and Roberts (2018) directly recognise emergence as a feature of school leadership:

*Leadership was the product both of intentionality (the teachers' own and others', such as mentors) and emergence (the complex interactions of these intentionality and consequent actions, the relationships formed, the cultural contexts of the school, locality and nation, and the tools and support frameworks (p. 8).*

Thus, schools operating as complex systems have direct relevance for school leadership - in how leadership moves around the organisation, in producing change and in conducting the main tasks of the organisation.

### The Role of AED in Comprehending Organisational Complexity

Having considered schools as complex organisations, I will now discuss how AED is directly relevant for understanding how HT/Ps approach the complex nature of their organisations.

In summarising my argument so far, HT/Ps are individuals within their organisations with a wide range of responsibilities. How they act within these responsibilities can be influential, and thus a form of leadership. However, these actions need to take place within a complex organisation. The features of complexity can mean that, for HT/Ps to comprehend and act on their responsibilities, they will be required to engage in a psychological sense-making process. I have discussed that the ego conducts the process of sense-making and that Loevinger's AED theory acts as a robust model for conceptualising how sense-making can be substantively different according to an individuals' stage of AED. In this section, I will discuss how different stages of AED could comprehend complexity in substantively different ways, and how this could shape leadership practice.

There is a potential overlap between the descriptors of later AED stages and the features of complexity theory. For example, if we accept that schools can be conceptualised as C.E.L.L.S (Hawkins and James, 2018), events/objects within them are interconnected and interdependent in many ways, and parts of a system can influence each other due to the unseen and hidden connections between them (Lewin, 2000; Bryne and Callaghan, 2014; Hawkins and James, 2018). The descriptors of AED stages suggest that all do not readily comprehend interconnectivity. According to Loevinger, it is those in the Conscientious stage which have the potential to explore patterns between different variables (Manners and Durkin, 2000), which one could hypothesise would mean that such individuals might be ready to explore interconnectivity. Before this stage, those in the Self-Aware stage begin to recognise multiple variables within a given context (Hy and Loevinger, 1996). Within the Individualist stage and beyond, there is the first recognition of interconnectivity; interdependence is recognised as a key concept within the Individualist stage (McCauley et al., 2006). Hence, in this one aspect of complexity alone, there appears to be an increasing recognition of complexity moving between the stages. Furthermore, it would appear that it is the later stages of AED where there is the greatest overlap with this feature of complexity theory.

There are further examples of potential overlaps between the later stages of AED and complexity theory. One of these examples is how, in the Individualist stage, individuals begin to distinguish process over outcome (Hy and Loevinger, 1996). This feature could facilitate individuals to understand that, in complex systems, small actions could have large effects (Holland, 2006: Hawkins and James, 2018). Recognising that there is no direct link between input and outcome could also introduce concepts of ambiguity and relative unpredictability, both factors within complexity science (Mitleton-Kelly, 2003: Kemp, 2009) and later stages of AED (Pfaffenberger and Marko, 2011). Finally, there can be an increased tolerance for the paradox and contradiction in the Individualist stage (Hy and Loevinger, 1996: Vincent, Ward and Denson, 2015), both of which are common features of complex systems (Stacey, Griffin and Shaw, 2000). In summary, many of the features of complex organisations appear to overlap with the later stages of AED. From this observation, it could be deduced that individuals in later stages of AED might recognise a greater degree of complexity in their organisations.

There is some limited research which supports the notion that later stages of AED support individuals in recognising and working with complexity in organisations. For example, Vincent, Ward and Denson (2015) interviewed 335 individuals on a leadership development programme. They

compared the reflections of “Shifters” (individuals who moved from one adult AED stage to the next), “Movers” (those who exhibited development but remained with their current stage) and “Non-shifters” (individuals who demonstrated no development throughout the intervention). It was those in the Shifter category that reported feeling an increased tolerance for difference and ambiguity, which are key aspects of complexity. James, James and Potter (2017) also recorded how those who had worked with HT/Ps in later, post-conscientious stages had a broader appreciation of complexity and a growing ability to consider different options. The authors concluded that those in the post-conscientious stages might be “*better equipped to make sense of the context*” (p. 387). There is also some limited evidence to suggest that individuals within specific stages of AED struggle when faced with specific demands that can be associated with complexity. Complex systems, as a consequence of the interactivity and highly connected nature, can be ambiguous and challenging to comprehend (Hmelo, Holton and Kolodner 2000; Hmelo-Silver and Azevedo, 2006). Van Velsor and Drath (2004) described how leaders in the Self-Aware stage felt negatively challenged when faced with roles that exposed them to this ambiguity within their role. It would therefore appear that later stages of AED could offer leaders to recognise and work with more features of their complex organisational environment. However, such claims are limited: there has been no prior attempt to establish how HT/Ps of different stages of AED recognise complexity in their organisations. Thus, the potential link between AED stage recognition of complex organisations is not yet fully understood. Although it would appear that later stages of AED might overlap with complexity as seen in schools, this requires further investigation.

In summary, there is a potential overlap between the key features of complexity within organisations and the later stages of adult AED. AED could, therefore, offer a framework for studying the differentiation in how leaders comprehend and, consequently, work with organisational complexity. However, such work in the field is limited, and thus further research is required to establish the extent to which individuals in different stages of AED recognise complexity within organisations and the subsequent influence on practice.

### ***2.2.5 Comprehending and Responding to Wicked Problems***

This section will consider how AED can offer insights into how HT/Ps comprehend and interact with wicked problems within their organisations. The relevance of wicked problems to the responsibilities of an HT/P will be established. Finally, I will discuss how individuals of different stages of AED could potentially comprehend and respond differently to wicked problems and what this could mean for how HT/Ps lead their organisations.

## Conceptualising Wicked Problems

Rittel and Webber (1973) were the first to conceptualise wicked problems. Rittel and Webber's (1973) features of a wicked problem are as follows:

- Wicked problems are hard to define and are essentially unique.
- Wicked problems have no stopping rule. This is to say that wicked problems do not have a clear ending, and therefore it is difficult to determine whether the solution solved the problem.
- The wicked problem might have emerged as a consequence of another problem.
- Because wicked problems are hard to define and outcomes hard to determine, a solution cannot be right or wrong. Instead, Rittel and Webber (1973) prefer to consider the judgement of a solution as good or bad.
- Multiple explanations might exist as to how the wicked problem emerged.
- Because wicked problems are hard to define, essentially unique, can have multiple explanations, and there is no stopping rule, there is no clear solution for the problem. Furthermore, no test could determine whether the solution will work.
- All attempts to solve the problem might have consequences which are irreversible and not forgettable.

Although wicked problems were initially the domain of planning and public policy (Peters, 2017), it continues to be a useful framework for conceptualising problems across different levels of public and private organisations. For example, the concept of the wicked problem has been used to examine within-team problems (Pacanowsky, 1995), complexity within organisations (Waddock et al., 2015) and on a wider system and public policy level (Camillus, 2008; Head, 2010).

In contrast to wicked problems, so-called tame problems (Rittel and Webber, 1973) consist of the following aspects:

- Unlike wicked problems, tame problems can be defined, and the core variables involved within a tame problem can be identified.
- Whereas wicked problems have no stopping rule, a solution applied to a tame problem will bring a clear resolution and end to the problem. Furthermore, unlike a wicked problem, the solution to a tame problem can be correct or incorrect.

- The tame problem is, unlike the wicked problem, not unique and can be familiar to a problem that was previously encountered within the organisation.
- Grint (2005) compares the tame problem to a puzzle. Although the answer requires thought and planning, a general strategy can be employed, which will solve the problem. Hence, a solution that can arise from previous experience of handling this task will solve the problem.

To summarise, wicked problems are substantially different to tame problems. Based on these two definitions, there are several critical differences between tame and wicked problems:

- Solution to the problem. In the tame problem, there is an answer that can be right – so, the challenge within the tame problem is in identifying the model, equation or formula to reach the answer. However, in wicked problems, there is no agreed correct or predetermined answer that will solve the problem beyond doubt.
- Structure of the problem. The variables and features of a tame problem can be clearly defined and work in regular, predictable patterns that might have been observed before. This is not possible in wicked problems: there are multiple explanations, no stopping rule (which means the problem is not necessarily over once a solution is applied), are difficult to define. They are essentially unique. In addition, a tame problem has a clearly defined boundary, whereas the wicked problem's boundary is fluid, recognising that they have a history and no clear endpoint.

I will now move on to discuss how wicked problems are particularly common in school organisations and their impact on how HT/Ps lead their organisations.

### **Wicked Problems and Educational Leadership**

Two streams of evidence suggest that wicked problems feature within an HT/P's responsibilities. First, I will discuss how wicked problems are an extension of the organisational complexity of educational organisations and, therefore, can be expected to be a feature of the HT/Ps responsibilities. Second, I will seek to draw attention to previous attempts to document wicked problems within educational organisations, and the responsibilities of HT/Ps within them.

The nature of schools as complex systems means that wicked problems will frequently occur within them. As described in section 2.2.4, schools can be conceptualised as a complex system or otherwise known as C.E.L.L.S (Hawkins and James, 2018). Peters (2017) argues that the wicked problem was a precursor to complexity science. Furthermore, they argue that wicked problems, just like complex

systems, are diverse, interactive and relatively unpredictable due to emergence. Waddock et al. (2015) also observed the interplay between complexity science and wicked problems, stating the shared features between the two concepts:

- Both the organisation and the problem are challenging to define, with few (if any) static boundaries.
- There are many interconnections between factors and variables.
- Both concepts recognise how there is unpredictability.
- Both the complex organisation and wicked problem constantly evolves, with emergent properties in both concepts.
- It is recognised that there is no definitive agreed solution that can provide a 'right' answer.
- Any solutions that are applied will leave an impact which might require attention.

With so many shared features, wicked problems could be considered an extension of organisational complexity. As schools are complex systems themselves, it would therefore be reasonable to expect wicked problems to be relatively common within them.

There has been a general recognition that the responsibilities of HT/P will involve wicked problems. Bottery (2016) recognises the wicked features of problems within educational leadership and how they require *"a thorough appreciation of the nature of wicked problems and their solutions"* (p. 168). Wright (2011) argues that one wicked problem is the greater autonomy HT/Ps, enshrined in current English government policy, over how they organise as a school. Dematthews and Serafini (2019) argue that the problems that HT/Ps face can develop wicked properties, due to the self-perception of their role, lack of resources and the demands that new public management places on an HT/P working in the public sector. Thus, there is general recognition that HT/Ps will encounter wicked problems within their responsibilities.

There is further evidence to support the claim that wicked problems are inherent within a range of the HT/P responsibilities. First, the work of Leithwood, Begley and Cousins (1994). They explore the frequency of the types of problems within an HT/P's responsibilities, utilising a similar construct to the wicked problems. Within their study, Leithwood, Begley and Cousins (1994) distinguish the simple, 'high ground' tasks from more challenging 'swampy' problems, and it was swampy problems that were considered more problematic for HT/Ps. The conceptual overlap between swampy and wicked problems is considerable. A brief analysis of the overlap between the features of these two problems can be found in table 3.

Features of Swampy Problem (Leithwood, Begley and Cousins 1994)	Features of Wicked Problem (Rittel and Webber, 1973)	Shared Ground
<p>Only a vague understanding of the situation is possible.</p> <p>Little relevant knowledge</p>	<p>Wicked problems are hard to define</p> <p>Wicked problems have no stopping rule</p> <p>The problem might be a consequence of another problem</p> <p>Wicked problems have multiple explanations</p>	<p>Both the wicked and swampy problem will be hard to define or vague. As they are challenge to define, it will be harder to establish any relevant knowledge that the individual might have. Furthermore, the reasons that problems will be vague/hard to define is because problems can carry on (no stopping rule), its relationships with other previous problems, and the multiple explanations involved.</p>
<p>The problem is challenging to solve.</p> <p>The response to the problem requires fine-tuning.</p>	<p>Solutions are good or bad – they are not right or wrong</p> <p>There is no test for solutions</p> <p>All attempts to solve the problem might have consequences which are irreversible and not forgettable</p>	<p>Both wicked and swampy problems recognize that the problem is challenging. Within wicked problems, there is detailed exemplification as to why problems of this type can be considered challenging. For example, a swampy problem can be considered challenging because there is no test for solutions or a right answer.</p> <p>Furthermore, the definition of wicked problems suggests why responses will require fine-tuning – namely because a solution might cause substantive consequences.</p>
<p>There is no clear way of knowing what would be better.</p>	<p>The problem is essentially unique.</p> <p>There is no clear solution.</p>	<p>This overlap is clear – both frameworks recognize that no solution could be put into place that will achieve a predictable and positive outcome.</p>
<p>No procedure for dealing with the situation.</p> <p>Little experience in dealing with at least some of the problem.</p> <p>Little relevant knowledge.</p>	<p>There is no clear solution.</p>	<p>Both models suggest that, because of the unique nature of the problem, that is no procedure or knowledge from previous experience, which can be transplanted to form a solution.</p> <p>Complex systems are, in part, complex because of the involvement of people (Turner and Baker, 2019) Considering wicked problems as an extension of this complexity, I would suggest that the involvement of others and one of the consequences of this (value judgements) therefore serves to make the problem unique.</p>

Table 3 Comparison of Swampy Problems and Wicked Problems (Rittel and Webber 1973; Leithwood, Begley and Cousins, 1994).

Also, Leithwood Begley and Cousins (1994) add the following features:



- Heavily people oriented.
- Potential for value conflicts.
- Emotions are intense.

Given the conceptual overlap, research into swampy problems (Leithwood and Stager, 1989; Leithwood, Begley and Cousins, 1994) can serve to provide evidence that wicked problems are particularly pertinent for the responsibilities of a HT/P. Two-thirds of teachers recognised that swampy problems took up most of their time (Leithwood and Stager, 1989). Secondly, HT/Ps reported that swampy problems account for one in five of the problems that they engage with (Leithwood, Begley and Cousins, 1994). Thus, there is some quantifiable evidence that these problems can exist in schools and that HT/Ps recognise they fall within their responsibilities. Given the conceptual similarity, the frequency of swampy problems identified by Leithwood, Begley and Cousins' (1994) consequently highlight that wicked problems can be a common feature of a HT/P's responsibility.

The responsibilities of an HT/P can also be analysed to demonstrate that some of their responsibilities have qualities of wicked problems. One of these examples is how HT/Ps develop a local offer for children with special educational needs (DfE, 2015). Armstrong (2017) notes that one of the wicked problems relevant to special educational needs is "*achieving a curriculum which is fit for purpose in meeting the holistic needs of learners with a disability*" (p. 230). This responsibility is wicked for several reasons. First, reconciling the demands of academic qualifications while preparing a vulnerable young person for adult life is a tension commonly observed within the literature, and many solutions proposed to address this tension (Fullan and Hargreaves, 1996; Clark, 2006; Biesta, Priestley and Robinson, 2015). The recognition that there is tension in how HT/Ps answer this problem provide evidence that there is no right answer. For example, behavioural needs within some specific challenges can create tension between the child's developmental needs and an adult's welfare (Warren et al., 2006; Stader, 2006; Teasley, 2014). The individualised presentation of special educational needs within a child (Turk, Graham and Velhurst, 2007) means each child's response to the school's solution will have a unique dimension. Finally, the implications that educational provision can have on later chances of children in this population group (Armstrong, Armstrong and Spandagou, 2010) recognises that this challenge does not necessarily stop once the problem has been solved.

Two more potentially wicked problems within an HT/P's responsibilities are identifiable in Earley and Bubb's (2013) examination of the working patterns of six new HTPs in significantly challenging

circumstances. The first of these problems was “[T]he need to raise the quality of teaching quickly in order to raise standards and meet the expectations of inspectors” (Earley and Bubb, 2013, p.789). Raising teaching quality has been achieved through many mechanisms. These include: prescriptive teaching and learning practices (Rubin, Patrick and Goldring, 2017); distributed leadership approaches (Harris, 2008; Heck and Hallinger, 2009); and collaborative and democratic leadership approaches (Klar et al., 2016; Hallinger and Heck, 2010). Thus, raising standards is a wicked problem within an HT/P’s responsibilities as there is no ‘right or wrong’ answer, but appreciate that there is a ‘good or worse’ (Rittel and Webber, 1973) response that might meet inspector’s expectations. The second problem was “*dealing with the legacy of the previous headteacher*” (Earley and Bubb, 2013, p.789). This quote resonates with a feature of complexity within organisations. Complexity theory outlines that organisations have a history that will influence their future direction (Mason, 2008; Schneider and Somers, 2006). Rittel and Webber (1973) also recognise that the problem might have arisen from a prior situation. Therefore, reconciling what has happened within the organisation previously is a wicked problem that falls within an HT/P’s responsibilities.

In summary, wicked problems are a common feature of a HT/P’s responsibilities. I have discussed that, as complex organisations, wicked problems are likely to be more prominent. I have attempted to substantiate this claim with evidence that wicked problems are a common feature of an HT/Ps responsibilities, and how several of their responsibilities meet the features of wicked problems outlined by Rittel and Webber (1973).

### **The Role of AED In Responding to Wicked Problems**

So far, I have argued that HT/Ps in England has a wide range of responsibilities, and that action in relation to these responsibilities are influential. Several of these responsibilities can be considered wicked problems. The features of a wicked problem will mean that, for HT/Ps to comprehend and respond within them, they will need to engage in the process of sense-making. In section 2.1.1 and 2.1.2, I argued that the ego conducts this process and that each stage of AED has substantively different ways of comprehending circumstances around them. In this section, I will consider how different stages of ego, described by Loevinger’s AED theory (Hy and Loevinger, 1996), suggests that HT/Ps in different AED stages are likely to comprehend and respond to wicked problems in fundamentally different ways.

There is a lack of research which describes how HT/Ps of different AED respond to wicked problems. I will therefore use two strands of evidence which suggest that it is reasonable to consider that

HT/P's of different AED stages could respond and act on wicked problems differently. These two threads of evidence are how individuals within different AED stages exhibit general differences when carrying out their responsibilities, and how expert (Leithwood, Begley and Cousins, 1994) leaders in schools overlap with Individualist stage of AED and beyond.

There have been several studies which have attempted to link differences in behaviour of those with leadership responsibility to their underlying stage of AED. Harris and Kuhnert (2008) and Strang and Kuhnert (2009), using 360 feedback from peers, subordinates and line managers, observed correlation between AED stage and how individuals were ranked. This ranking included the following metrics: managing performance; leading change; catalysing teams; cultivating talent; inspiring commitment, and creating vision. Helsing and Howell (2014) found that leaders who were operating beyond the Conscientious stage of AED were more likely to be rated as 'high potential' by their assessors during a leadership development programme. Bartone et al. (2007) found 21 military students recorded a significant correlation between higher stages of AED with higher leadership ratings from peers ( $r = 0.38, p < 0.03$ ) and subordinates ( $r = 0.30, p < 0.05$ ). Bushe and Gibbs (1990) assessed 64 participants via an internal 360 review of peers and trainers, attempting to establish a link between different AED stages and what they termed, 'consulting competence'. The linear regression analysis confirmed that the AED stage, as measured by the WUSCT, significantly predicted trainer and peer ratings in a range of consulting competencies: diagnostic skills; personal influence; problem-solving; technical flexibility; strong self-concept; developing a common understanding with a team and the use of theory. These studies, therefore, recognise that the underlying stage of AED can begin to explain observable differences in how individuals engage within their leadership responsibilities.

Rooke and Torbert's (1998; 2005) action logic framework is perhaps the most cited example of establishing differences in how individuals of different AED stages respond within organisations. Rooke and Torbert (1995; Fisher, Rooke and Torbert 2003) refined adult development stages of Cook-Greuter (1999) and Loevinger (Hy and Loevinger, 1996) into approaches to the responsibilities within their role. These types are described in figure 1.

Type	Characteristics	Strengths	Weaknesses
Opportunist	<i>Wins any way possible.</i> Self-oriented; manipulative; "might makes right."	Good in emergencies and in pursuing sales.	Few people want to follow them for the long term.
Diplomat	<i>Avoids conflict.</i> Wants to belong; obeys group norms; doesn't rock the boat.	Supportive glue on teams.	Can't provide painful feedback or make the hard decisions needed to improve performance.
Expert	<i>Rules by logic and expertise.</i> Uses hard data to gain consensus and buy-in.	Good individual contributor.	Lacks emotional intelligence; lacks respect for those with less expertise.
Achiever	<i>Meets strategic goals.</i> Promotes teamwork; juggles managerial duties and responds to market demands to achieve goals.	Well suited to managerial work.	Inhibits thinking outside the box.
Individualist	<i>Operates in unconventional ways.</i> Ignores rules he/she regards as irrelevant.	Effective in venture and consulting roles.	Irritates colleagues and bosses by ignoring key organizational processes and people.
Strategist	<i>Generates organizational and personal change.</i> Highly collaborative; weaves visions with pragmatic, timely initiatives; challenges existing assumptions.	Generates transformations over the short and long term.	None
Alchemist	<i>Generates social transformations (e.g., Nelson Mandela).</i> Reinvents organizations in historically significant ways.	Leads societywide change.	None

Figure 1 Summary of Action Logics (Rooke and Torbert, 2005)

Figure 1 describes broad observations, which include substantive differences in how individuals interact with the rules, how they interact with others and what they focus on within situations. The authors point to efficacy studies in supporting this model, observing a correlation between CEOs developing beyond the Individualist/Conscientious stage, and the degree of organisational transformation (Rooke and Torbert, 1998). However, Fisher, Rooke and Torbert (2003) claim that the content of stages is largely reliant on using a combination of Cook-Greuter's doctoral thesis observations (1999) and their own experiences with clients and organisations. Thus, although they establish a potential difference, the specific details of how leaders engage in their leadership responsibilities require further empirical grounding within specific, relevant problems.

Only two studies were identified that attempted to acquire greater descriptive detail on the how different AED stages responded to problems. Fisher and Torbert (1991) noticed subtle differences between the independent (Conscientious) and inter-independent (Individualist) AED stages. Namely, individuals within the Individualist stage would use others in understanding the situation and

recognised the value of working with others in a dialogic fashion. This observation was a substantive shift from their observations of those in the Independent stage (Conscientious stage), whereby the managers in the study would attempt to direct others to their version of the right answer. Merrion, Fisher and Torbert (1987) used an in-tray assessment of 49 subjects to determine whether those in more mature stages (as determined by the WUSCT) were more likely to be considered effective in their response to the circumstances. Managers at later development stages (Individualist stage and above) were deemed more effective because they were significantly more likely to opt for a Model 2 approach. The Model 2 approach is defined by Schön (1983) as a management style that is collaborative and seeks to involve others more deeply and critically within problems. Thus, later stages were associated with handling tasks through the deeper, collaborative involvement of others.

Within educational leadership, James, James and Potter (2017) recorded how HT/Ps responded and described those in different stages of AED. They recorded how those who interacted with those in the 'expert' (or Self-Aware) stage would be solution-focused and would follow systems and rules; Achievers (or Conscientious) focused on improvement, and those within the Individualist stage could recognise different options. However, as pointed out, there are only three studies which explored this question, and none considered whether these problems were indeed wicked enough to require the leader to engage in sense-making. Thus, there is a need for further study to build on the potential differences in AED and an individual's subsequent response to their responsibilities within specific, wicked problems.

In cross comparing Leithwood, Begley and Cousin (1994) expert leader framework with stages of AED, there is further support for the potential of AED to understand a HT/Ps' practice concerning wicked problems. As discussed in this section, swampy problems are comparable to wicked problems in many ways. Leithwood, Begley and Cousins (1994) suggested that it is expert HT/Ps that are best equipped to approach these problems. When the features of Loevinger's AED stages are cross compared with Leithwood, Begley and Cousins' (1994) description of how these expert leaders approach swampy situations, there is considerable overlap between the expert leader and the post-conscientious stages of AED.

There are three specific places where the Leithwood, Begley and Cousins (1994) expert leader and insights from the Individualist AED stage and beyond overlap. The first overlap is in collaboration through co-construction. According to Leithwood, Begley and Cousins (1994), expert leaders can embrace empathy whereby they take other people's perspectives in account (Reiss, 2017) and seek to co-construct a shared understanding of the situation. Furthermore, expert leaders seek to include

others, working mutually through recognises different perspectives from across the organisation and at different levels of the problem. Empathy and mutual co-construction with those around them have been recognised as features with the Individualist stage and beyond (Carzoli, Gaa and Liberman, 1983; Hy and Loevinger, 1996; Pfaffenberger and Marko, 2011). The second overlap is in reasoning. Leithwood, Begley and Cousins (1994) claim that expert leaders develop goals within the problem using abstract reasoning, which is conceptualised as how we understand patterns and explain what is happening using information and insights from the environment (Markovits, 2013). This observation overlaps with how those in the Individualist stage and beyond are generally considered able recognise complex patterns within organisations (McAdams, Ruetzel and Foley, 1986; Hy and Loevinger, 1996) and will engage in dialectical thinking to facilitate making links between unresolvable differences (Basseches, 1984). The final overlap is being able to reflect on value systems in relation to the knowledge presented. This ability to engage in external and internal value systems is a hallmark of later stages. According to Pfaffenberger (2011) and Kegan (1982), a common feature of the Individualist stage and beyond is to recognise the conflict and tensions between external and internal value systems. Thus, there is a potential link between the practices of HT/Ps considered effective in responding to swampy problems in educational organisations and the later stages of AED. This potential demonstrates the need for research which directly examines the stage of AED within HT/Ps and their practice.

In this section, I have analysed the literature around the application of AED to understanding how HT/Ps of different AED stages might be expected to respond to wicked problems differently. I will now summarise these observations and apply them to the rationale for researching the AED of HT/Ps, specifically within wicked problems.

## Summary

In this section, I have demonstrated that there is considerable potential for the AED stage to explain differences in how HT/Ps respond to the wicked problems that are important features of their organisations. Those around leaders, in the form of 360-degree or peer review mechanisms, have reported substantive differences according to AED stage. In addition, there is some limited work that directly observed the responses of leaders in different AED stages, which also observed qualitative differences in response to tasks. Furthermore, further analysis suggests features of HT/Ps responses to concepts similar to wicked problems are aligned to later stages of AED.

However, this section also highlights an important gap in the literature. Studying the response of leaders to specific tasks comprises only a small fraction of the literature on AED within leadership. None use the wicked problem framework either. This oversight is important: AED might only be relevant in the specific circumstances of a wicked problem which place a demand on sense-making (section 2.1). Also, any differences are reliant on studies of reflection or 360-degree feedback data, meaning we have no rich description of how AED can be manifested within an HT/Ps response. Critically, HT/Ps are significantly underrepresented in that there is no study (asides from James, James, and Potter, 2017) that has used HT/Ps within their sample. Despite this gap, my analysis of the expert leader concept (Leithwood, Begley and Cousins, 1994) demonstrates the promise of AED in understanding the practice of HT/Ps in relation to wicked problems. Therefore, understanding how HT/Ps respond to the problems that, as I demonstrated in section 2.1, are particularly relevant to educational organisations, could provide rich, unique, and relevant insights to educational leadership.

### *2.2.6 How Headteachers/Principals Work with Others in Their Organisation*

#### The Role of Others in Educational Leadership

In section 2.2.1, I discussed the consensus that leadership is associated with establishing influence with those around them. Consequently, how individuals interact with others is going to be a critical part of how HT/Ps establish influence. In this section, I will argue how several theories, that are dominant within educational leadership propose that the nature of the relationship between leader and those around them appears to have two key features. These two key features are:

- Mutually collaborative.
- Developmental.

#### *Mutually Collaborative*

In this section, I will discuss the relevance of mutual collaboration. First, I will explore how three different concepts of leadership that are popular within educational leadership (instructional, transformational and distributed), all refer to the need for collaboration and mutuality. Second, I will support this analysis through a review of models which specifically focus on collaboration within the leadership of schools. These models include collaborative school leadership (Woods and Roberts, 2018), professional learning communities (PLCs) and collaborative professionalism (Hargreaves and O'Connor, 2018).

Collaboration can be conceptualised as bringing individuals together around a common purpose to solve a problem or achieve a joint understanding of a situation (Newell and Bain, 2018). Several theories of educational leadership promote the importance of HT/Ps collaborating and sharing responsibility with those around them. Distributive theories, through recognising leadership as the conjoint agency of multiple actors (Spillane, 2006; Gronn, 2002), imply the need of individuals to recognise their interdependence and act together. Those working within instructional leadership recognise the importance of collaboration. Blase and Blase's (1999) survey of 800 teachers in the US identified that teachers report effective instructional leaders as those who develop a collaborative culture. In transformational leadership, collaboration is a key concept (Stewart, 2006; Anderson, 2017). Within schools, there is an association between greater collaboration within an organisation and transformational leadership practice (Sun and Leithwood, 2012; Allen, Grigsby and Peters, 2015). These models, all of which are markedly different in their priorities and approaches (Northouse, 2016), recognise collaboration as a critical aspect of leadership, and that an HT/P will have an important role in ensuring that collaboration occurs across the organisation.

Also, these same models highlight that this collaboration needs to occur within a mutual frame of reference. Mutuality is a dyadic relationship between leaders and those around them (Dabos and Rousseau, 2004; Miller, 2007). Dyadic relationships “involve interdependence, exchange, and reciprocity” (Liden, Anand and Prajya, 2016, p.155). Thus, a relationship based on mutuality involves an equal interchange between individuals, whereby they can influence each other in recognition that they are connected. Again, several prominent models suggest the importance of mutuality. In distributed leadership, Gronn (2002) notes that mutual trust must occur between those involved in the leadership relationship. Harris (2003) recognises the need for mutual learning facilitated through close relationships. Printy and Marks (2006) claim that instructional leadership should be shared:

*the best results [student outcomes] occur in schools where principals[headteachers]... facilitate leadership by teachers; that is, principals [headteachers] are active in instructional matters in concert with teachers whom they regard as professionals and full partners (p. 130).*

Here, given the definition of mutuality, this sharing of leadership raises individuals beyond subordinates to reciprocally working alongside others. In transformational leadership, Burns (1978) recognises the role of mutual influence. Others reflecting on transformational leadership recognise that the sharing of leadership in this way can facilitate the instructional goals of the organisation (Hallinger 2003; Day, Gu and Sammons, 2016). Thus, given the definition of mutuality outlined above



and the variety of different positions within these models, how HT/Ps hold those around them in mutual regard is a critical component of how HT/Ps are expected to work with others.

Models which place successful teacher collaboration explicitly at the core of school leadership and as a mechanism for school improvement also stress that collaboration requires a mutual regard for those around them. For example, Woods and Robert's (2018) collaborative school leadership focuses on leading through collaboration and mutual support. Through the philosophy of co-development embodied within their work, the following aspects are considered important within a collaborative school leadership approach:

- The opportunity for everyone in the school, through collaborative learning, to grow and develop.
- Power-sharing. Sharing and facilitating others to engage in leadership and ensuring everyone has a say in the aim, values and management of the school.

Through what they term "*transforming dialogue*" (Woods and Roberts, 2018, p.131) conversations occur across a mutual plane. This plane is both in the purpose to achieve shared understanding, but also in supporting the ability of everyone having the opportunity to exchange, critique and respect the views of others across the organisation. Thus, within this model, the importance of collaboration and mutuality in the practice of an HT/P is maintained.

Professional learning communities (PLC) are another model of educational leadership in which mutuality and collaboration is considered central. Vescio, Ross and Adams (2008) argue that the student achievement, achieved using PLCs, depends upon staff work collaboratively to develop their teaching practice. Stoll, McMahon and Thomas (2006) identify the key defining points of PLCs, which stress collaboration and mutuality. These include:

- Interdependence.
- Meaningful mutually supportive relationships.
- Collaboration that considers a wider range of perspectives and stretches each other's understanding.

However, mutually collaborative relationships do not necessarily occur readily and require support and structure. Hargreaves and O'Connor's (2018) model of collaborative professionalism states that school leadership should have two structures: formal structures, such as the organisation of meetings and projects, and informal structures such as involving a range of individuals and

encouraging deeper relationships between staff, to promote collaboration. Crucially, McLaughlin and Talbert (2001) also recognise that the HT/P's sets the conditions for such work, including in the formal structures and how they engage with staff. Thus, both models allude to how collaboration requires HT/Ps to recognise the need for structure and intentionality.

Within this brief review, I have discussed how a wide range of educational leadership theories expect HT/Ps to embrace collaboration and mutuality within how they work with others.

Collaboration involves ensuring that ideas are built together with a wide range of individuals, within in a mutual frame of reference that recognises the interdependence upon each other. This section thus has two observations. First, that collaboration and mutuality are key aspects within educational leadership. Second, the importance of structures within collaboration recognises that the process of collaboration is multifaceted and highly complex to achieve.

### *Developmental*

In addition to these features, several models of educational leadership suggest that HT/Ps should maintain a developmental relationship with their staff. In such models, the role of the HT/P is to help the organisation and individuals to thrive through development. Robertson's (2008) coaching leadership model, based on a range of empirical work on school leaders in New Zealand, has a central focus of development: "*Educational leaders...focus on improving learning opportunities as the main function*" (p. 21) as part of their main practice. Leaders must provide "*continuous leadership development and improvement of practice*" (p. 21). Drago-Severson (2004) also identifies the role of the HT/P in creating the holding environment and supportive relationships for adult development to occur within their organisations. Across these models, the HT/P is focused on the development of their staff and conceptualises development of others as a key aspect of their leadership practice.

Many of the aforementioned models that stressed collaboration and mutuality have also explicitly referred to the importance of development. Collaborative leadership stressed the importance of holistic growth of all in the organisation through collaborative learning (Woods and Roberts, 2018). One of the core purposes of instructional leadership is the promotion of staff learning (Printy, Marks and Bowers, 2009; Hallinger, 2010). Those who discuss distributed leadership note the advantages to staff development that the sharing of responsibility can bring (Harris, 2003; Spillane, 2006). Transformational leaders seek to develop the capacity of their staff as leaders (Stewart, 2006; Printy, Marks and Bowers, 2009). Thus, the focus on staff development is an inherent feature within several

of the aforementioned models of educational leadership theory and, in particular, a feature of models that stress mutuality and collaboration.

In summary, several models of educational leadership have prioritised the HT/P's approach to working with others as a fundamental part of leading an educational organisation. Furthermore, these theories all share three expectations of how HT/Ps should work with those around them. Namely, that HT/Ps should have a mutually collaborative, developmental approach to working with others. In the subsequent section, I will discuss the potential of AED to explore how individuals make sense of others and the potential for ego to shape their interactions with those around them.

### The Role of AED in Shaping How We Work with Others

In this section, I will briefly outline the important role that the ego has in shaping the extent to which individuals engage in mutually collaborative, developmentally focused interactions with those around them. First, I will describe the stepwise progression in individual interactions within Loevinger's AED model, which suggests that interactions with others are only constructed as mutual, collaborative and developmental within the later stages of AED. Finally, I will discuss how this stepwise progression is echoed in the primary research which has applied to the AED stage to general leadership practice.

As outlined in section 2.1.2, Loevinger stated that one of the four sub-traits of AED to how others are conceptualised in our efforts to construct a world view. 'Interpersonal style' (Loevinger, 1978) represents an individual's understanding of relationships and the purpose of their interaction with those around them. A more specific examination of these stages reveals that mutual collaboration and development can be considered a feature of the later stages of AED:

- **Mutuality and collaboration:** Cook-Greuter (1999) describes the shifts that occur across the stages of AED. Generally, up until the Self-Aware stage, individuals view themselves as independent of those around them. Cook-Greuter (1999) also recognises that, within the Conscientious stage, individuals begin to recognise their dependence upon others. Moving into the Individualist stage, individuals begin to recognise inter-independence with others (Hauser, 1993; Rooke and Torbert, 2005). By recognising inter-independence, they begin to acknowledge the need for others and how they are mutually interconnected to other individuals within a system. Consequently, the need to collaborate with others could be expected to grow through these stages. Critically, as individuals move to the Individualist

stage, mutuality within how they work with others could be expected to emerge through the recognition of inter-independence.

- Their role in helping others: within the Self-Aware stage, individuals begin to recognise their role in supporting others through help. Within the Conscientious stage, individuals states they develop an intense responsibility for others (Hy and Loevinger, 1996). Within the Individualist stage and beyond, individuals take greater interest in the development of others, becoming an increasingly prominent feature of their sense-making (Kegan, 1982; Drago-Severson, 2004).

In summary, Loevinger's AED stage model suggests there is a stepwise progression in how different stages of AED interact with others. Movement through the stages is characterised by an increasing importance of the role of others. From this, collaborative approaches might be more observable in later stages. Within the Individualist stage, the concept of mutuality in how individuals engage with others could also emerge through the inter-independence they recognise with others. There are also substantive changes in the role they see for themselves in the development of others. Critically, it is in the Individualist stage, and beyond where mutually collaborative and developmental could be stronger themes within the relationships they have with others.

There is some limited evidence to suggest that those in later stages of AED are more likely to hold mutually collaborative relationships with those in their organisations. First, it would appear that individuals in later AED stages are reported to engage more with teamwork and are considered stronger team players. Bartone et al. (2007) reported that later AED stages were significantly correlated to perceptions of greater teamwork, developing others and oral communication from peers ( $r = 0.38$ ,  $P < .03$ ) and subordinates ( $r = 0.3$ ,  $P < 0.5$ ). Furthermore, Harris and Kuhnert (2008) in studying 74 executives found that later Leadership Development Levels (LDL) significantly predicted leadership effectiveness, as measured by a 360-degree feedback mechanism, which included catalysing teams. This definition included and achieved similar results on leadership performance later on (Strang and Kuhnert, 2009). Second, there is some limited evidence to suggest the greater role they play in teams could be collaborative. Fisher and Torbert (1991) observed in 25 individuals that those in the Strategist stage and beyond, collaborate more closely with their subordinates, explore their points of view, and seek cognitive frameworks that will integrate the views of others. Finally, there is some evidence that those in later stages engage in teamwork within a mutual frame. Bushe and Gibbs (1990) study of consulting competence in 61 managers observed that later stages of AED were associated with increases in developing a common understanding with those around

them. Bartunek, Gordon and Weathersby (1983) described later stage leaders as recognising the mutual nature of relationships around them. Leaders in the post-Conscientious stage have been described as more adept at organisational transformation because they have been observed to manage power in a manner that recognises the needs of all parties (Rooke and Tolbert, 1998; 2005; Barker and Tolbert, 2011). Collectively, there is some evidence to suggest those in later stages of AED focus on teamwork and limited evidence which suggest these interactions are collaborative and mutual.

There would only appear to be one study that has explored whether those in leadership positions differ in their focus of staff development according to the AED stage. Joiner and Joseph's (2007) study of 604 managers observed that those at their equivalent of the individualist stage and beyond would "*actively facilitate their [others] development*" (p. 133). However, beyond this, there is little observation of this way of working in other leadership studies. Therefore, while development is a key feature within post-conscientious sense-making, it has not received much attention to date within empirical studies. I return to critique this limited evidence base within section 2.3.

## Summary

In this section, I have highlighted that several prominent theories of educational leadership propose that HT/Ps should hold mutually collaborative and developmental relationships with those around them. I have outlined the conceptual overlap between these features of interpersonal relations and the later stages of AED. There is some indication that those in later stages of AED might have a mutually collaborative, developmental approach to working with those around them. However, the research which has explored these specific domains with leaders is limited, and none of these studies have included HT/Ps.

### ***2.2.7 How Headteacher/Principals Comprehend and Interact with Affect***

So far, in this literature review, I have discussed that HT/Ps have to respond to wicked problems within complex organisations. Furthermore, several theories of educational leadership propose that HT/Ps need to maintain collaborative, mutual and developmental relationships with those around them. With each observation, I have attempted to show the potential of AED to shape the response of the HT/Ps., I have also shown that whilst there has been some research exploring AED within leadership practice, this has been limited and very little has occurred with HT/Ps.

In this fourth section, I will demonstrate how affect is an important factor within an educational organisation. Given the multiple definitions that exist, I will first provide a brief conceptualisation of affect as an umbrella term encapsulating emotions, feelings, and mood. I will make the case that affect is a feature of organisational life and is a particularly pertinent issue for educational organisations. The substantial differences in AED stages within the conceptualisation and interaction with affect will be outlined. I will then analyse the limited research findings, which has demonstrated how leaders in different stages of AED interact with the different components of affect.

### Conceptualising Affect

Affect can be conceptualised as a broader term made up of three components: feelings, mood and emotion. James, Crawford and Oplatka (2018) conceptualise these three terms as follows:

- **Emotion:** Emotion is the processing of events that can produce feelings, thoughts and physical response. Emotional processing involves interpreting an event which can lead to feelings, thoughts and volition.
- **Feelings:** Feelings are relatively intense, temporary and typically have an identifiable rationale and a definable content. The feelings we communicate to others might be affected according to the social norms of the external environment, our language capacity and the type of relationship we hold with those around us.
- **Moods:** Our affective state in the longer term.

Critically, affect influences how we think about incidents and the actions we take. Emotion and cognition can be intertwined – how we think about a problem is connected to how individuals emotionally process the problem. Alwyn (1985) described how thought and feeling exist in complex relationship, whereby one can influence the other depending on the stimuli. Clore and Ortony (2000) also recognised this, describing how emotions contain a cognitive component, such as appraisal. Therefore, in comprehending a problem, affect is important. Critically, how we emotionally process incidents can generate feelings and thoughts which influence volition (Frijda, 2004), which refers to our willingness to act (Hitlin, Andersson and Elder, 2015). Recognising the role of affect within the broad system of cognition and action is important for hypothesising the influence of affect on HT/Ps and how they interact with their environments.

## Affect and Educational Leadership

Affect is a highly relevant construct for educational leadership for two key reasons. First, affect is considered to be a prominent component of educational organisations. Second, HT/Ps will interact with affect as part of the responsibilities they have within their role. Subsequently, how HT/Ps interact with affect is an important consideration for the domain of educational leadership theory and practice.

Affect can be said to be prominent within educational organisations due to the purpose of the organisation and the activities that occur within them. First, whether one argues that education is perceived as preparing society for a productive role in the economy (Spring, 2015) or as a humanistic endeavour of development (Rogers, Lyon and Tausch, 2013), schools are at the frontline of developing the individuals that will shape society, and such careers are rich in affect (Isenbarger and Zembylas, 2006). Second, schools are home to vulnerable people who are cherished within society – they have a special legal status, a tailored version of human rights (United Nations General Assembly, 1989) and specific settings designed solely for their academic and holistic development (Ofsted, 2019). Schools experience considerable change, which can occur in two forms – one, through the institutional primary task of enabling student learning (Hargreaves and Fink, 2004; James, 2010). Through this process, children are intended to change because of the interaction between the school and themselves. Also, as schools cannot retain their students beyond a fixed age range, a new cohort of students enters and leaves the school every year. The concept of change can be considered to present challenges to how people emotionally comprehend, process and respond (Bovey and Hede, 2001) and the subsequent feelings and moods this can generate.

Furthermore, teaching itself (the core activity of an educational organisation (Hallinger, 2005; Murphy, 2002) has many affective components. Teaching is often described as a ‘vocation’ due to, in part, the deeply personal meaning that teachers hold in how they conceive their role (Hanson, 1995). Furthermore, interaction with students can place huge emotional demands on teachers (Isenbarger and Zembylas, 2006). Johnson et al. (2005) demonstrate that teachers have worse than average scores on psychological well-being, postulating that this is potentially due to the high degree of emotional labour within their profession. Hargreaves (1998) supports the notion of teaching as a profession of high emotional labour, and that such labour has a positive role to play in their position. It is therefore clear that educational organisations, considering their role in society, the nature of the primary task and the demands they have on them as organisations are rich in affect.

Critically, HT/Ps play an important role in the organisation, containment and support of affect within organisations. The first line of evidence in supporting this claim is how leadership theory broadly points to the role of leaders in interacting and containing a range of elements associated with affect. For example, in Ashkanasy and Humphrey (2014), levels of leadership and emotional organising demonstrate how leaders have a role in to play across the organising . From the surface level, such as organising the feelings that can emerge from a specific event (Level 1) through to how they model their engagement within emotion (Level 3) and then interact with emotion across the organisation (Level 5). Indeed, studying the emotional intelligence of leaders (defined as the ability to perceive, express, understand and manage the emotions of self and others: Mayer, Salovey and Caruso, 2000) is a particularly popular line of leadership enquiry (George, 2000; Goleman, Boyatzis and McKee, 2013). Several correlative studies have associated emotional intelligence with perceived leadership efficacy (Wong and Law, 2002; Rosete and Ciarrochi, 2005). Even the most critical analytical review, which explored the link between emotional intelligence and transformational leadership, recognised the role of a leader in managing affect of an organisation within successful leadership practice (Harms and Crede, 2010). What these studies recognise is that a substantive part of a leader's role in any organisation will be to interact with affect successfully.

Educational leadership also recognises the important role that HT/Ps play in responding to the affective demands of their organisations and the individuals within them. I have outlined that schools are rich in affect because they hold the future, they look after treasured possessions, they are constantly changing and contain a primary task (teaching) that is high in emotional labour. Across different educational leadership models, HT/Ps have responsibility for all these factors. Transformational leadership models within education make clear that the HT/P is critical in setting and maintaining a vision, managing the process of change, and influencing the pattern of interactions within a school environment (Sun and Leithwood, 2012). Instructional leadership identifies how the HT/P is a key in improving teaching and learning practices in educational organisations, and therefore heavily involved in teaching itself (Day, Gu and Sammons, 2016; Blase and Blase, 1999). The DfE also make it clear that it is the headteacher that is chiefly responsible for student welfare (DfE, 2015). Therefore, an HT/P's responsibilities will have a highly affective factors within them.

The importance of how HT/Ps respond to affective features within their organisation is highlighted in the consequences of their actions in relation to these responsibilities. Skaalvik and Skaalvik, (2011) in a questionnaire of 2596 Norwegian primary and middle school teachers, observed how HT/Ps



support their colleagues in the emotional challenges of the teaching role can impact on a teachers' sense of belonging and their job satisfaction. An earlier study by the same authors on the same data set (Skaalvik and Skaavik, 2010) noted the importance of supervisory support. They defined supervisory as:

*teachers' feeling of having cognitive and emotional support from the school leadership, that they could ask the school leadership for advice, and that their relation to the school leadership was one of mutual trust and respect (p.1065).*

Supervisory support was related to the efficacy across the wider teaching group. Lassila et al. (2017) sample of 16 novice teachers noted how HT/Ps could promote good working conditions by influencing how people were feeling within the community and directly through engaging on a personal level. In these scenarios, affect is important. HT/Ps can influence the affective experience of those around them, and therefore the degree of connection to their staff and recognition of affect being crucial for the organisation. In summary, the tasks and responsibilities that make schools uniquely rich in different components of affect, overlap considerably with an HT/P's responsibilities, and how an HT/P navigates these responsibilities have consequences for their organisation and those within them.

In addition to the affect within their organisation, HT/P themselves recognise how their role raises affective challenges for themselves. In semi-structured interviews with secondary HT/Ps, Kelchtermans, Piot and Ballet (2011) reported how HT/Ps experienced conflicting emotions – they describe the conflict that can occur between different groups they feel loyal to and the tension between loneliness and belonging. Crawford (2009) reported how headteachers recognised the significance of the decisions they make, the potential for feelings and moods to be generated from their decisions and their role in understanding the complex dynamic between individual emotional states and the wider context. Beatty (2000) interviewed five secondary headteachers, and they all recognised/appreciated their role to perform tasks, even if they generated negative feelings. Therefore, the challenges of how they respond and consider affect has consequences for not just their organisation, but for their own role as well.

In summary, I have discussed how affect can be considered a relevant, prominent factor within educational organisations and in the responsibilities of HT/Ps. How an HT/Ps comprehend and interacts with affect will influence the organisation, the individuals within it and their own

experience of their role. In the next section, I will outline how AED has a substantive role in how individuals recognise and respond to feelings, mood and emotions.

### The Role of AED in How We Comprehend and Interact with Affect

Based on Hy and Loevinger (1996) description of stages, AED could influence the extent to which leaders can recognise different components of affect within schools. References to different aspects of affect occur across the four main domains that comprise AED (cognitive complexity, interpersonal relationships, impulse control and conscious preoccupations). Before the Conscientious stage, there is little reference to affect. Individuals up to and including the Self-Aware stage focus on overt behaviour (Loevinger, 1976). The recognition and conceptualisation of affect becomes more complex at the Conscientious stage, whereby they are increasingly aware of the role of emotion in interaction with others and develop a sense of empathy (Carlozzi, Gaa and Liberman, 1983; Manners and Durkin, 2004). Individuals begin to recognise how feelings can differ in individuals and will look to explore feelings with those around them (Hy and Loevinger, 1996). Thus, between the Self-Aware and Conscientious stage, there are significant shifts in recognising emotion and, thus, in how they conceptualise affect within others.

Individuals within the Individualist stage become increasingly fluent and interested in the different components of affect. Lanning et al. (2018) observed that Individualist responses to the WUSCT were more likely to discuss feelings and moods within their relationships and communicate them at a deeper level than others. This observation has been recognised by Labouvie-Vief, DeVoe and Bulka (1989) and Lane et al. (1990), who correlated ego stage to the degree by which individuals would identify feelings. Emotional awareness, as measured by the Levels of Emotional Awareness Scale, has also been linked to results on the WUSCT (Mayer and Salovey, 1995). Furthermore, there are some themes which emerge from the Individualist stage for the first time. Namely, Hy and Loevinger (1996) with a greater recognition of the complexity of interpersonal interaction. There is a recognition that events can produce conflicting and contrasting emotions (Kegan, 1982). Therefore, Post-Conscientious stages of AED can be associated with an increasingly complex comprehension of affect, and individuals within this stage show a greater interest in feelings of others and how they express them.

Despite the overlap between the interaction with emotion and stage of AED, there has been little research within the leadership domain that explored adult development and how leaders

comprehend, process and act upon affect. Cook-Greuter (2004) as much as acknowledges this, through implying an overlap between adult development stages and emotional intelligence:

*Leaders with the greatest emotional intelligence (high Self-Awareness, self-management and social skills) – that is, those who would also likely test high on a developmental test had the most positive effect on working climate (p.280).*

Emotional intelligence is defined as the “ability to monitor one's own and other people's emotions ...and to use emotional information to guide thinking and behavior” (Srivastava, 2013, p.97). By only stating that “they are likely” (p.280) to perform better on assessments for emotional intelligence, Cook-Greuter (2004) recognises that this link was not yet fully established.

The failure to establish this concrete link between components of affect and AED continued to the present day. Joiner and Josephs (2007) make the general claim that leaders in later stages have greater emotional awareness, but it is not a prominent feature of their model. Reams (2017) observes that most claims of the effectiveness of later AED stages lie within the assumption of their higher emotional maturity. These efforts are representative of the limited work in the field. This is no great surprise given that, as noted across educational leadership, the role of affect within leadership and organisational life is underdeveloped. Thus, there is little which has observed how the clear differences in understanding affect translates into leadership and organisational practice.

Despite a paucity of evidence, it would be reasonable to suggest that there should be differences in how HT/Ps of different stages would identify and work with affect. HT/Ps recognise their role in managing the components of affect within themselves and in their organisation (Crawford, 2009; Cliffe, 2011; Berkovich and Eyal, 2015). However, HT/Ps might recognise differing degrees of affect within their role and that of others because of the substantive differences in the comprehension of affect according to AED stage (Kegan, 1982; Labouvie-Vief, De Voe and Bulka, 1989; Lanning et al., 2018). Given the role that relationship and emotion management play in several theories of educational leadership outlined earlier in this section, these differences could be expected to emerge in how HT/Ps engage and influence those around them. This point can be exemplified in a specific example around the concept of empathy. The importance of empathy as a construct within a HT/Ps practice has been considered (Zorn and Boler, 2007; Oplatka, 2017). Furthermore, Lassila et al. (2017) and Skaalvik and Skaalvik (2011) noted how teachers felt it was important for HT/Ps to connect on a personal level. However, empathy (the ability to understand and share the feelings of another) emerges in the later stages of AED (Carlozzi, Gaa and Liberman, 1983; Manners and

Durkin, 2004). This example exemplifies the potential consequence of AED on a HT/P's practice and why there is a good case to consider the relevance of AED in how HT/Ps engage and interact with affect, in spite of the lack of research in this domain.

To summarise, there is a link between affect and stage of AED. As we move through to the later stages of AED, we might expect individuals to have a greater recognition of affect and comprehend greater degrees of complexity around feelings, moods and emotion. I have suggested that these substantive differences in stages of AED might be relevant. However, this hypothesis is limited by the considerable lack of research – both in how leaders experience different components of affect according to their stage of AED and by the lack of research into affect within organisations more broadly.

So far, I have discussed how AED could be relevant in shaping the practice of a HT/P. I have discussed the potential influence that AED has for comprehending: how a HT/P works with complex organisations; how HT/Ps engage and respond to wicked problems; how HT/Ps conceptualise the role of others, and how HT/Ps understand and respond to the different components of affect. Part of reviewing these four domains has been analysing previous attempts to establish the relevance of AED within those who hold leadership responsibilities. I now intend to review the general methodological approaches employed within these studies. Following on from this review will be an overarching summary of the potential relevance of AED to a HT/P practice.

### *2.2.8 A Critical Discussion on Methodology*

In summarising approaches to methodology within this field to date, I would suggest that the predominant focus has been to quantify the relationship between efficacy, behaviour, and leadership. Most of the studies cited employed either 360-degree feedback (where individuals across the organisation are asked to report on specific behaviours of a participant (Bracken, Rose, and Church, 2016) or self-report tool. Both tools would have a pre-determined set of behaviour and attempted to statistically correlate patterns in the feedback of overt behaviours to specific stages of adult development. In some cases, such as Bartone et al. (2007) and Bushe and Gibbs (1990), effectiveness was pre-determined by the research team. Using analytic generalisation, whereby researchers attempt to generalize from specific areas of the case to broader constructs or theory (Firestone, 1993), the aggregation of specific behaviours within individuals of a given stage would then be attributed to their stage of AED. However, this methodological approach has several limitations. These limitations include only collecting data on general behaviour: not eliciting

structure behind actions, and not establishing the context of their observations. The case for alternative methodological approaches will be made to avoid these limitations.

Most of the aforementioned studies offer generalised descriptions of the behaviour. For example, studies such as Harris and Kuhnert (2008), Bartunek, Gordon and Weathersby (1983) and Fisher and Torbert (1991) claim that higher stages of AED are more collaborative. However, there is little qualitative data provided that describes how these leaders collaborate: a problem given the many forms that collaboration can take. There are other examples of this: how Bushe and Gibb (1990) associate later AED stages with problem-solving, or the association with emotional awareness (Joiner and Josephs, 2007) and emotional maturity (Reams, 2017). Across these examples, the statements do not contain specific details on how those in later stages respond or interact differently. These examples are illustrative of the generalised descriptions of behaviour and process that are common within the leadership literature – the production of a list of behaviours as opposed to the detailed account of leadership behaviour (Lincoln and Guba, 1985).

However, only recording general observations on behaviour limits the extent to which the participants' actions and behaviour can be attributed to AED. In the process of linking patterns to an underlying broader theory, i.e. analytic generalisation, intensity and thick description is required (Lincoln and Guba, 1985). I would argue that the list of general behaviours falls into the error that Ayers, Kavanaugh and Knafel (2003) described as common within such research when they “*fail to go beyond the production of a list of themes or key categories*” (p. 881). This can be particularly challenging in the case of a generalising to AED, which itself provides no predictions around overt behaviour (Loevinger, 1987). Thus, without a detailed and nuanced description of process and behaviour, the extent to which such behaviours can be attributed to an individual's stage of AED, and whether this is reflective of leadership capacity, is undermined.

Furthermore, previous methodological approaches undermine associations between their observations and AED because they were limited in exposing the motivations or reasoning behind the behaviour. For example, whilst these studies recognise that leaders in later stages might have greater emotional awareness (Cook-Greuter, 2004; Joiner and Josephs, 2007; Reams, 2017) or recognise greater degrees of organisational complexity (Pfaffenberger and Marko, 2011; Vincent, Ward and Denson, 2015; James, James and Potter, 2017), such studies cannot allude to what is motivating their specific interactions. In this way, whilst there is some limited insight into the content, the underlying structure behind the content is unexposed. Studies that have attempted to explore the underlying structures behind overt behaviour are unclear as to how it has been achieved

– either because the methodology has not been shared (Rooke and Torbert, 2005) or are reliant on self-report and therefore lack triangulation (Joiner and Josephs, 2007). Without understanding the structure behind an individuals' responses, it is more challenging to establish how AED stage has shaped a response. Ego is a largely unconscious process of sense-making, and the overt thoughts, responses and affect are the conscious consequences of this process (Loevinger, 1976). As Kegan notes, the underlying structure behind the content is an important factor in studying the relevance of adult development (Kegan, 1982; 1994). Without exposing the underlying structure in a reliable fashion and suitable context, I would argue it is challenging to engage in analytic generalisation– the process by we examine how a phenomenon is representative of the underlying theory (Healy and Perry, 2000). Thus, without this data, it becomes a challenge to state that leadership behaviours result of AED-derived sense-making confidently.

Finally, the contexts in which behaviours have been observed further undermine associations between AED and behaviour. In section 2.1.1, I suggested that individuals engage in sense-making to comprehend novel, ambiguous situations and that the ego is the central psychological construct within this process. I have suggested that such novel, ambiguous contexts are likely to emerge when problems are wicked, as opposed to tame (Rittel and Webber, 1973) and when they occur in complex organisations (Hawkins and James 2018). Thus, the role of the ego is most likely to be dominant and of greater relevance in a specific set of contexts. However, most of the studies identified in this literature review that has linked AED to those with leadership responsibilities do not consider the types of tasks in which the leader's behaviour was observed. In studies within the literature review, no reference is made to contexts and types of tasks which individuals around the leader (and the leader themselves) should reflect upon when giving their feedback or self-report. Therefore, most of the established differences in AED within leadership contexts might not have been established in contexts which would place a demand sense-making and thus the ego. This point raises questions over whether any differences in practice stated within the field to date could be confidently associated with their stage of AED and no other relevant psychological constructs or contextual factors.

In summary, the predominant methodological approach within the field undermines attempts to link a leader's practice to their stage of AED has three main areas for development; descriptions of behaviour lack detail or thick description (Lincoln and Guba, 1985); they do not expose the underlying structure behind the response; and they do not seek to assert whether such behaviours occur in tasks where the ego is more likely to be relevant in shaping the leaders' decisions and

interactions. In section 2.3.2, I will suggest that a new methodological approach that could generate detailed description, expose underlying motivations, and study AED within an appropriate context could provide an original contribution to the field.

### *2.2.9 Summary*

I have discussed the potential for AED to offer substantive insights into the practice of HT/Ps. Individuals in different development stages appear to work with themselves and their context in fundamentally different ways across a broad range of properties: comprehending the complexity of their organisations; comprehending and interacting with the ‘wickedness’ within a wicked problem; how they work with others and in interacting with feelings, moods and emotions. In addition, it would appear that later stages; of AED might offer HT/Ps some specific advantages in relation to these four aspects of their responsibilities.

Critically, no empirical work has specifically explored HT/Ps and their practice in relation to AED. The empirical research done to date in the broader leadership field demonstrates potential, demonstrable differences in the practice of leaders according to their stage of AED. However, there is only a limited number of studies available and the methodological designs of these studies limit their capacity to make ‘reliable’ associations between AED and practice. Therefore, I will now seek to establish why a study exploring an HT/P stage of AED can contribute both knowledge and novel methodological approaches to the field of educational leadership.

## **2.3 Original Contributions to Knowledge**

In this section, I will argue how a qualitative study exploring how HT/Ps of different AED stages respond to the wicked problems within their complex organisations would provide an original contribution to educational leadership, leadership more broadly and to research methodology within this domain. I will argue that studying HT/Ps provides an original contribution because this could begin to establish AED as a relevant factor for the leadership of schools. I will also suggest what original contributions that a qualitative approach, embedded within the context of wicked problems, could bring:

- More detailed observations on practice than has been previously possible.
- Establish firmer links between the leader’s practice and the underlying AED theory.
- New methodological approaches within this domain.

### *2.3.1 Original Contribution to the Field of Educational Leadership*

Of the studies that have looked at the relationship between AED and leadership, none has occurred within a school context or HT/Ps. This is significant. Leadership is bound by the context in which leaders serve (Osborn, Haunt and Jauch, 2002) and, as I have previously outlined, leadership within schools places specific demands that individual HT/Ps will need to navigate: they have to comprehend complex systems; comprehend and interact with wicked problems as a common part of the role; work with their staff in a developmentally focused, mutually collaborative manner; and interact with mood, feelings and emotion. Establishing the relevance of AED to HT/Ps will mean establishing the differences in stages of AED according to these four specific areas.

Findings associating leadership with AED within the literature review only demonstrate the **potential** relevance of AED to an HT/Ps practice. This is because most of the studies linking AED to leadership practice outside of educational settings are limited in their generalisability and therefore, the extent to which they can be applied to HT/Ps. The first reason for this claim is that the statistical approaches within several of these papers limit the extent to which they can be generalised. For example, despite Strang and Kuhnert's (2009) status as one of the most cited papers in the field, the authors recognise that their ANOVA-acquired significance on AED and performance levels lacks sufficient statistical power and should, therefore, be treated with caution. In addition, other studies have resorted to using non-parametric statistics to establish correlational and predictive relationships between stage, behaviour and efficacy (McCauley et al., 2006; Vincent, Ward and Denson 2015; Bartone et al. 2007). For example, some studies used Spearman Rho to establish correlation (Bartone et al., 2007; Rooke and Torbert, 1998). Non-parametric statistical tests are usually employed when the data does not meet a normal distribution (Field, 2017). Consequently, generalising and applying the findings to another context is usually not recommended without considerable caution being applied (Haslam, 2003). Thus, several of the main papers within the field that claim to demonstrate the link between general leadership practice and AED should only be applied with caution and, thus, cannot be considered generalisable.

This caution is further justified by the inconsistency in the study of behaviours/performance observed within different stages of AED. Across the studies cited, there is not one shared tool used for establishing differences in behaviours and efficacy associated with leadership. Bartone et al. (2007) used a military-derived 360 feedback scale for assessment and performance, and Strang and Kuhnert (2009) used an internally developed 360 model. Other studies made judgements of effectiveness using internally determined criteria (Rooke and Torbert, 1998; Helsing and Howell,



2014; Boiral, Baron and Gunnlaugson, 2014). Without a shared measure, it is far more challenging to confirm that these studies are exploring similar definitions of leadership, efficacy or behaviours. Therefore, the capacity of this group of studies to demonstrate the replicability is limited, which negatively impacts on the extent to which the findings can be considered generalisable.

Furthermore, without awareness of the contexts/circumstances in which these behaviours were observed, questions will remain whether such leadership behaviours were established are relevant to the challenges that HT/Ps face. Earlier on in this literature review (section 2.2.1), I documented how HT/Ps face a series of aspects which makes the challenge of leading schools particularly unique. I have subsequently made the case that wicked problems are particularly relevant issue for HT/Ps (section 2.2.5) and that several popular models of educational leadership place specific focus on a specific way in which HT/Ps should interact with others. However, due to the methodological approach within the field to date (section 2.2.8), it is not possible to assert whether the contextual demands observed within other studies apply to HT/Ps, and thus whether the relevance of AED in shaping practices of leaders outside of education are relevant for HT/Ps.

Thus, these three critical factors limit the extent to which the findings can be applied to other populations – in this case, HT/Ps. Therefore, a study exploring AED within school leaders will provide an original contribution, because:

- The primary data exploring HT/Ps within different AED stages does not exist.
- Previous attempts from the field of general leadership studies cannot be confidently generalised to HT/Ps.

### *2.3.2 Original Contribution to Methodology*

In section 2.2.8, I outlined how previous methodological discourses have undermined attempts to demonstrate the relevance of AED to leadership practice and that new paradigms and tools are required. In this section, I will briefly outline what original contributions this thesis can make to advancing the methodological approaches within the field.

Applications of AED to leadership practice have been dominated by quantitative efforts to associate specific, overt and concrete behaviours at each stage to efficacy. In section 2.2.8, I explained the potential flaws in this approach. Equally, I also argued that a qualitative approach which can generate the rich description needed to expose both content and structure behind the response (Kegan, 1982) would help make firmer links between AED and HT/Ps practice within educational

organisations. However, such examples are rare and, as identified, examples in the field have not outwardly shared their methodological approach (e.g., Rooke and Torbert, 2005; Joiner and Josephs, 2007). Furthermore, very few have attempted to capture the relevance of AED in tasks or problems where sense-making, and therefore the ego, is likely to be central in determining how individuals comprehend and respond.

Therefore, this thesis can make the following original contributions to methodology:

- 1) In developing an openly qualitative approach to determining links between AED and leadership practice that, to date, is not available for others to replicate or adapt.
- 2) In developing research tools to study AED in contexts where it is most likely to be relevant in determining comprehension and interaction.

### *2.3.3 Summary*

The main points from this review are as follows. First, there is a need to study AED stages within HT/Ps. Despite there being a case for the relevance of AED, there have been no previous attempts to study AED in relation to how HT/Ps interact with their contexts and how others respond to them. Furthermore, I have outlined why attempts within other leadership domains are not generalisable to HT/Ps. Thus, empirical work in this domain would provide a new set of primary data that, in of itself, would provide original knowledge to the field that explores the relevance of AED to shaping an HT/Ps practice. Finally, I have suggested that new methodological approaches could offer an original contribution to the field by offering alternative research designs that could facilitate stronger links between AED and the practice of HT/Ps. Such approaches need to expose rich, nuanced detail in how individuals of different stages of AED respond, the underlying structure behind their responses and engage individuals in where the ego is likely to be central in comprehending and interacting with the problem.

## **2.4 Summary and Purpose of the Research**

Schools place significant demands on HT/P's sense-making capacity. The evidence for this statement is as follows:

- Sense-making occurs in situations which are complex or wicked in nature (Weick, 2001; Holt and Cornelissen, 2014). This sense-making processes an individual's inner world and how they organise and interact with their external reality.

- This sense-making is conducted by the ego (Loevinger, 1976; Hy and Loevinger, 1996) and can move through qualitatively different stages as adults go through their life. AED provides a robust and relevant theoretical framework for exploring how headteachers make sense of the sort of tasks and problems common within complex educational organisations. I have discussed the 30 years of evidence that supports claims of AED as a psychologically robust model of how individuals construct their world view and interaction with the world around them.
- I have made the case that HT/Ps, as a consequence of their role and the organisation that they serve, will need to comprehend complex environments and (as part of this complexity) the wicked problems within their organisations. Such circumstances will also place a demand on how HT/Ps interact with others and the emotions, moods and feelings within the organisation.

Therefore, HT/Ps will be engaging in sense-making activities to handle the complexity and wicked problems that surround their role. Due to the central role of the ego in sense-making, I suggest that the sense-making capacity of the HT/P, as defined by their stage of AED, could be an important component for how HT/Ps lead their organisations.

I discussed how AED could offer unique contributions to understanding how HT/Ps lead their organisations within four key domains:

- How HT/Ps comprehend organisational complexity.
- How HT/Ps might comprehend, interact and respond to the wicked problems that are common within their educational organisation.
- How HT/Ps work with others within their organisation
- How an HT/Ps handles the emotions, feelings and moods that are prevalent within their organisation, their role and those around them.

No study to date has explored the relevance of AED for how HT/Ps in England respond to wicked problems and organisational complexity. The potential of AED has been demonstrated through previous work linking leadership capacity to the AED stage. However, this work is not only limited in the number of studies conducted but are limited in their capacity to be generalised to HT/Ps and the contexts they serve.

Therefore, I suggest that profiling how HT/Ps of different AED stages respond to the aforementioned four domains would provide the following original contributions to knowledge.

- The primary data itself will provide rich, qualitative profiles of how HT/Ps at each stage interacted with the problem and how others work with them. This is new to the field as this has not previously been attempted.
- As a study of this kind has not been attempted previously, the primary data could offer new reflections on educational leadership theory. In particular to how we appreciate how HT/Ps: comprehend wider organizational complexity; how they comprehend and respond to wicked problems that are common in their context; work with others within their organisation; and the extent to which affect is important within their practice.
- As a new line of enquiry within educational leadership, developing methodological tools will be an important facet of this work. Previous attempts to explore AED in the broader leadership and management domain struggle to establish strong links between its observations, underlying AED and the wider leadership literature. Therefore, I will look to contribute a way of reliably obtaining the rich, descriptive data required to explore how HT/Ps work with their organisations in a manner that can be reliably associated to their stage of AED.

## Chapter 3 Methodology

### 3.1 Introduction

This chapter will describe the research methodology underpinning the results of this thesis. I will first state the research aims and questions, outlining the primary focus on establishing the relevance of AED to the practice of a HT/P. Critical realism will be introduced as the main research philosophy, the multiple case research design will be justified as an appropriate choice for the in-depth study of HT/Ps of different AED stages.

In section 3.5, I will describe the recruitment and sampling of HT/Ps from an initial pool of potential participants through social and traditional print media. Section 3.6 will outline the robust procedures undertaken to assess AED within the sample of 20 HT/Ps. Furthermore, I will set out how details of the practice of each HT/P were collected using recalled and hypothetical critical incidents. The data analysis section gives an account for how the common themes between individual units were robustly aggregated to identify a common set of themes within three stages of AED: The Self-Aware stage, the Conscientious stage and the Individualist stage. In section 3.9, I discuss the efforts undertaken to ensure the research was credible, dependable, confirmable and transferable (Lincoln and Guba 1985). Finally, I will detail the potential ethical challenges the research presented and the steps undertaken to protect participants and their organisations.

### 3.2 Research Aims and Questions

#### *3.2.1 Research Aims*

To investigate how HT/Ps of different stages of AED comprehend and respond to the complexity of school settings and wicked problems within their organisations.

#### *3.2.2 Research Questions*

1. Are there substantive differences between HT/Ps who are at different stages of AED in a) how they conceptualise and work with complexity and b) respond to wicked problems within their organisation?
2. To what extent can these differences be linked to their stage of AED?
3. Is being in the post-conscientious stage of AED advantageous to HT/Ps in their leadership work in their schools?

### 3.3 Research Paradigm

Critical realism (Maxwell, 2012) is the paradigm underpinning this research. Following a brief conceptualisation of the term, I will outline how critical realism has influenced my approach to ego as a psychological construct. In subsequent sections, I will refer to how critical realism has influenced the choices made within research design, methodology and approach to research quality.

#### 3.3.1 Critical Realism

I have situated this research within Maxwell's conceptualisation of critical realism for qualitative researchers (Maxwell, 2012). A crucial feature of Maxwell's conceptualisation is how he distinguishes between ontological realism and epistemological constructivism. Ontological realism determines that there is an external reality that exists beyond our constructions, and this is independent of theory and individual perception (Maxwell, 2012). Schwandt (2007) crucially extends ontological realism beyond physical entities:

*we act as if the objects in the world (e.g., events, structures, people, meanings) exist as independent in some way from our experience with them (p. 256).*

Thus, an ontological realist position assumes that there is a reality independent of our constructions and that this reality consists of both observable and unobservable entities.

However, in Maxwell's position of realism, knowledge is presented as a construction that attempts to capture reality. Epistemological constructivism presents knowledge itself as an attempt to model the independent reality beyond our reach (Robson, 2011). Knowledge, therefore, is a construction, a best attempt to capture reality. Maxwell and Mittapalli (2010) acknowledges that any construction, or knowledge, is therefore likely to be "*partial, incomplete and fallible*" (p. 8). Thus, such attempts to model reality should be open to challenge, reviewed and potentially discarded in the face of new knowledge which links more closely to the external reality.

To summarise, in utilising Maxwell's concept of critical realism, I acknowledge that there are entities (both physical and non-physical) which exist beyond our constructions and perspectives (ontological realism). Furthermore, knowledge (in the form of models or theories) is an attempt to construct an understanding of the external reality beyond our reach. Furthermore, as this attempt is a best attempt, any given model or theory is likely to be incomplete and should be open to revision and challenge.

### 3.3.2 Relevance of Critical Realism

Critical realism has relevance for how I conceptualise the role of the ego within this study and complements my understanding of the ego and AED as a theory. In the conceptualisation of critical realism outlined in section 3.3, mental processes exist beyond our interpretations, akin to physical entities (Sayer, 2000). Within this research, I have conceptualised the ego as a psychological entity that exists as a definitive part of our psychological architecture. The ego is real, from an ontological perspective, because it has properties which we can ascribe to an object that exists beyond our constructions. These properties are:

- The ego performs a function, that of sense-making.
- The ego has geographic properties. The ego has a conceptual place the key function of which is to act as a 'master' psychological trait over other psychological constructs (Loevinger, 1976). Therefore, the location of the ego is that of a central mediator of the psyche.
- The ego has interactional properties. It interacts with other psychological constructs, whether as a master trait, as hypothesised by Loevinger (1966) or as a central trait hypothesised by Hauser (1993). The ego adjusts and monitors other psychological traits, such as personality and moral reasoning (see section 2.1.2).

By having a function, a location and the capability of interaction, the ego can be said to have many features of an entity that exists beyond our own construction. Thus, there is a construct, which shall be referred to as the ego, that is a central sense-making device. The ego can be said to exist beyond the models or theories that attempt to label, define or explain how the construct works. Thus, the ego can be considered ontologically real.

This research, therefore, represents an attempt to construct knowledge. Namely, this knowledge is how AED manifests itself in how HT/Ps lead their settings. As this study is grounded in epistemological constructivism, I recognise that this knowledge will be "*partial, incomplete and fallible*" (Maxwell and Mittapalli, 2010, p. 8). I will maintain that the knowledge I generate represents a best attempt to capture and model how sense-making via the ego facilitates how HT/Ps comprehend and interact with their environments.

In this section, I have outlined my research paradigm through Maxwell's critical realist position. In subsequent sections, I will outline the steps I have taken to ensure that the knowledge produced is a robust attempt to model how the ego manifests in the way HT/Ps comprehend and interact with their environment. I will outline why I have chosen the multiple case study design to produce the

rich, nuanced data that I compared across different groups of AED stage to determine the links between practices and stage of AED. I will outline how my data analysis is grounded in the same critical realism that underpins the research questions. Finally, I will use the section 3.9 to demonstrate the lengths undertaken to ensure Lincoln and Guba (1985) quality criteria for qualitative research were met.

### 3.4 Research Design

Research design is the overarching approach applied in undertaking the research (Cohen, Manion and Morrison, 2007). In this study, the multiple case study design has been applied. In this section, I will provide a conceptualisation of the multiple case study approach and provide a rationale for this choice of research design.

#### 3.4.1 Defining a Multiple Case Study

My aim for this case study was two-fold:

- To explore patterns of response within specific stages of AED. This aim fits within Nisbet and Watt's (1984) definition of a case study: "*a specific instance that is frequently designed to illustrate a more general principle*" (p.72).
- To study the phenomena of ego-derived sense-making within a specific group: HT/Ps. Mills, Durepos and Wiebe (2010) describe that a case study could be individual participants, populations/groups of interest, or specific organisations. Hence, it is appropriate for me to utilise a case study to focus on a specific population.

Within these aims, I defined a case as a group of individual HT/Ps who have reached a specific stage of AED. I determined the number of case studies by the number of different stages identified within the sample. In this sample, I assessed individuals as being in one of three stages of AED.

Consequently, this research is comprised of three case studies. These are:

- The Self-Aware stage.
- The Conscientious stage.
- The Individualist stage.



Each case study is made up of individual HT/P who share the same stage of AED. The intention of each case study was to capture the common themes across the individual HT/Ps of the same AED stage.

### *3.4.2 Rationale for Case Study*

There are three reasons why I have selected a multiple case study approach. The first is the alignment to critical realism. Second, the multiple case study approach can facilitate the deeper exploration of context and mining of rich data which can facilitate analytic generalisation – the process by which a set of results can be considered reflective of an underlying theory (Firestone, 1993). Finally, case studies are an appropriate design for the study of complex phenomena, such as AED.

The choice of the multiple case study aligns to the conceptualisation on critical realism (section 3.3). As an epistemologically constructivist study, this study intends to establish how AED shapes a HT/P's practice. The project will, therefore, require constructing knowledge of how AED shapes comprehension and response to the complexity within their organisations and the wicked problems within them. My choice of a multiple case study design has several features that support the generation of this knowledge. First, case studies permit the collection of rich, nuanced and descriptive data (Bassey, 1999; Woodside, 2010). This rich detail will be vital to establish how those within a given stage of AED typically comprehend and respond. The multiple case study design enables a comparison between groups (Stake, 2006). Comparing between groups is important: AED is a hierarchically organised sequence of stages, with many conceptual links between the stages (see section 2.1.2). Therefore, documenting the patterns across individuals from different stages will be important to establish to what extent the underlying theory (AED) can explain practices within and across individual stages. Thus, as the multiple case design can facilitate collecting rich data collection and comparison across groups, I am more likely to establish more robust knowledge on the topic, thus embracing the critical realist paradigm underpinning this research design.

The second reason for choosing the multiple case study research design is how the design can facilitate analytic generalisation through thick description. Analytic generalisation is conceptualised by Yin (2003) as when "*a previously developed theory is used as a template with which to compare the empirical results of the case study*" (p. 2-3). Tsang (2014) and Firestone (1993) argue that case studies facilitate generalisation because the design permits a deeper study of the construct within a given context. Geertz (1973) refers to such depth as thick description. Thick description is

important to analytic generalisation of AED to a HT/Ps practice for two reasons. The first reason is that AED is a complex psychological construct. The ego operates largely within the unconscious and influences a broad church of psychological functioning (Loevinger, 1966; Loevinger, 1976) and has many potential outlets in how individuals think, feel and subsequently act (Lanning et al., 2018). Furthermore, the influence that the ego can wield is likely to be wide and subtle (McCauley et al., 2006; Joiner and Josephs, 2007). Thus, the research design needs to be able to facilitate a broad range of observations in a thorough manner. The second reason is that AED is a progressive psychological construct: by this, I mean that there are patterns which change across the AED stages (section 2.1.2). Thus, to analytically generalise the likely relevance of AED to a HT/Ps practice, any design must be able to generate thick description within and across different AED groups.

The multiple case study design offers several advantages to generating the thick description required for analytic generalisation. First, case studies are regularly adopted to document complex psychological phenomena, such as ego. For example, Freud (1961) used case studies to explain and exhibit the applications of psychodynamic theory. Piaget's constructivism was largely based on case studies of individual children (Piaget, 1957) and Fivush, Reese and Booker's (2019) collation of data to form a case study revealed individual narratives and trajectories of participants' personal development. Second, Robson (2011) explains that the flexibility permitted in case study, through using different data collection and analytical strategies, can produce a nuanced set of observations and a deeper study of the phenomenon under investigation. Because of the flexible capacity within the case study approach, Cohen, Manion and Morrison (2007) argue that the case study design can capture the nuance of the participants everyday experience. Finally, by arranging multiple case studies, one can compare across different AED stages and explore the detail in to which the progression between stages observed by Loevinger (1976) can be related to the practice of an HT/P, i.e., the extent to which the progression between stages is observable within different stages. Thus, thick description, facilitated by the flexibility of the case study approach, can subsequently promote a deeper study of a specific phenomenon in the real world and thus facilitate the analytic generalisation that Firestone (1993) claims this design can achieve.

In this section, I have discussed how the multiple case study provides a good research design for this study. The multiple case study design supports the underlying epistemological and ontological basis of this study and facilitates analytic generalisation within complex phenomena.

## 3.5 Sampling

A sample is a “*segment of the population that is selected for research. It is a subset of the population*” (Bryman, 2016, p. 695). In this section, I will outline the procedures undertaken for selecting the individuals involved in this study and the decisions taken within them.

### 3.5.1 Sampling Stage 1

The first step was acquiring a pool of HT/Ps that would take part in the study. The inclusion criteria of individuals who could potentially take part were as follows:

- The HT/P works within an English state sector primary or secondary school. I restricted the sample to England as education is a devolved power (Arnott and Menter, 2007) and England has its own inspectorate, curriculum and expectations on the role of the headteacher within the school environment (Wisby and Whitty, 2016).
- Have been in post for at least 6 months. The study involved obtaining data from other individuals around the HT/P. I would hope that these insights shared would be based on multiple and repeated observations of the headteachers’ practice. I felt six months was enough time for individuals to have had exposure to a wide range of incidents involving the HT/P.
- Have sought permission from their line manager and a designated direct report to take part in the study. The study involved interviewing these individuals and asking for their reflections on how their HT/P navigated school leadership. I therefore felt it pertinent that the HT/P asked how those around them felt about taking part before volunteering for the study.

I sourced volunteers through convenience sampling, which permitted HT/P to self-select themselves for the study if they felt they met the inclusion criteria. I followed Robinson (2014) ensuring the inclusion criteria defined a sample that was demographically local (HT/Ps that had been in post for a significant period) and geographically local (restricting invitation to HT/Ps in English state sector schools).

### 3.5.2 Sampling Stage 2

HT/Ps self-selected themselves to take part in the study. To engage potential participants in the study, I used the following routes.

- I directly reached out to individual HT/Ps by using Twitter.
- I approached a range of school organisations, local authorities and school focused organisations via email, requesting that they pass on the advertisement to local partner schools.
- My employer (A Higher Education Institution based in South West England) agreed for me to use their network of partner schools to directly approach HT/Ps.

At the point of recruitment, I informed HT/Ps that they would receive a package of support following their involvement in the study. This package included

- A report, outlining the themes found within their AED Stage.
- Three hours of coaching. The purpose of this coaching was to help them understand the result and to consider the next steps in their professional and personal development.

The combination of these routes generated a sample of 40 volunteer HT/Ps from across English state sector primary and secondary schools.

### ***3.5.3 Sampling Stage 3***

This stage involved selecting headteachers from the recruitment pool. I used stratified sampling, which is a form of purposive sampling that Robinson (2014) suggests is a:

*non-random way of ensuring that particular categories of cases within a sampling universe are represented in the final sample of a project (p. 32).*

In stratified sampling, the potential sample is stratified across predetermined categories to ensure that the final sample contains a representative sample from these stratifications.

In selecting these categories, I wanted to ensure that there was an equal mix of primary and secondary HT/Ps. This category emerged from working directly with HT/Ps in another stage of the project. Participants in the AED workshops (section 3.6.3) informed me that they felt, given the differences within the organisations, ensuring there was an equal mix would strengthen the findings. Consequently, I separated the HT/Ps into primary and secondary HT/P pools.

I then selected two HT/Ps from each pool, at random. I performed random allocation by giving each candidate a number and using a random number generator until a number that matched with a candidate was selected. The decision to select two HT/Ps at a time was pragmatic – as a part-time

student, committing to a small number at one time allowed me to pay individual attention to a group of busy individuals that would find committing to this study difficult. Only after completing data collection and analysis from the initial two candidates would I assess an individuals' stage of AED using the WUSCT data.

After completing the process for two individual HT/Ps, I returned to the initial pool of HT/Ps and selected another two HT/Ps at random. I continued to conduct this process until I had achieved saturation of the themes generated from within each AED case study. Saturation is a recognised feature of qualitative research analysis, which Given (2016) defines as the point at which "*additional data do not lead to any new emergent themes*" (p. 135).

Across the study, I invited 20 HT/Ps to take part. Each case study comprised the following:

- The Self-Aware Case Study - five individual HT/Ps/units
- The Conscientious Case Study -eight individual HT/Ps /units
- The Individualist Case Study - seven individual HT/Ps/units

Another approach could have been to score an individual's WUSCT first and use this as a stratification for selecting individuals to take part in the study. However, I would have been aware of each HT/Ps' stage of AED during the data collection analysis phases. Being aware of their AED stage could have compromised the study as it could have influenced how I interacted with HT/Ps and how I analysed the raw data. Selecting HT/Ps at random and then assessing for their stage of AED after the data analysis protected against selection bias. I explain the implications of this in section 3.9.6.

#### ***3.5.4 Sampling Stage 4***

Stage 4 focused on recruiting HT/Ps within the Autonomous stage of AED. In Stage 2, I failed to recruit any HT/Ps within the Autonomous stage. Due to the rarity of the Autonomous stage within the adult population (Cook-Greuter, 2004; Lanning et al., 2018), I concluded that securing such individuals might require a different sampling approach to be taken. Thus, I adapted my sampling approach in the following ways:

- I only recruited Executive HT/Ps. Executive HT/Ps have responsibility for more than one school through their leadership of a Multi-Academy Trust. Given the increased complexity of handling multiple sites, I felt that it might be more likely to find individuals in this

Autonomous stage within this demographic group. Recruitment of these individuals occurred through the same channels as identified in Stage 1.

- I used the WUSCT as a screening tool and sought only to invite participants for interview should they score an Autonomous rating on the WUSCT. I was critically aware that this switching to a purposeful approach would compromise the rationale for random selection outlined earlier in this section. Furthermore, unlike the findings from the other stages, I would not have been blind to the individual's stage of AED while collecting and analysing the data from interviews. I was, therefore, ready to ensure that these findings were reported separately from the main findings. Also, I would have treated these findings with far more caution than the observations from other stages.

However, despite identifying and assessing 15 Executive HT/Ps, no individuals within the Autonomous stage were identified. These individuals took no further part in the study and the data was discarded.

### 3.6 Instruments for Data Collection

I needed to collect the following from participants:

- Their stage of AED. This required a psychometric assessment. For this, I chose the Washington University Sentence Completion Test (WUSCT)
- How HT/Ps would typically respond to an incident within their organisation. To enhance research quality (section 3.9), I collected:
  - How the HT/P had responded to a pre-existing incident.
  - How the HT/P would anticipate responding to a hypothetical incident.

In this section, I will explain each of these instruments – their purpose, design and rationale.

#### *3.6.1 The Washington University Sentence Completion Test*

To determine AED stage, I administered the Washington University Sentence Completion Test 2<sup>nd</sup> Edition (WUSCT, Hy and Loevinger, 1996) to each participant. The WUSCT (Hy and Loevinger, 1996) is a semi-projective test of 36 stems of incomplete sentences (see Appendix 1). The semi-projective nature of the test is rooted in the use of incomplete sentences. By asking participants to complete the sentence, the individuals project their frame of reference onto the questions.

I will first provide a rationale for my choice of the WUSCT and why this is a superior test to alternative measures. I will then outline how I utilised the WUSCT to assess the AED stage of HT/Ps.

### Rationale for Selecting the WUSCT

The WUSCT is considered a robust approach to exploring ego (Manners and Durkin, 2000). The WUSCT explores all four components of AED (cognitive complexity; interpersonal style; impulse control, and X). Principal component analysis (PCA) is a statistical approach that can be used to explore the underlying structure and identifies if there is a unified property (i.e., ego) across a test (Jolliffe and Jorge, 2016). Ensuring the test is unified is important: Part of validity is having confidence that the different parts of the test is measuring the same underlying construct (Cohen, Manion and Morrison, 2011). Studies using the PCA technique demonstrated that the WUSCT is measuring one underlying construct. Loevinger (1998b) report a meta-analysis of  $\alpha=0.91$ . The first major component scored 8.8, accounting for 20% variance. The second component scored at 1.2. When the scores were scaled, the whole survey scored the same as the first component ( $r=.999$ ). This result means we can be confident that the test is measuring one construct. These scores have been previously repeated in Novy and Francis (1992) on an earlier version of the test and recorded similar sum scores and properties. This research confirms that all the individual stems within the WUSCT are assessing one underlying construct same construct and it is, therefore, an internally valid test.

Claims of internal validity (e.g., how well the test measures the underlying theory, Robson 2002) are strengthened when the WUSCT has been measured alongside other demographic variables and psychological constructs. The WUSCT has undergone extensive testing across different demographics (Loevinger, 1998b). The test adequately reports and captures responses of those from different genders or cultural backgrounds (Carlson and Westenberg, 1998). Whilst there have been overlaps with other psychological assessment scores, these are explained by the central role that AED has in psychological functioning (section 2.1.2). Whilst Cohn and Westenberg (2004) have observed a minor correlation between verbal fluency and AED (0.2-0.34), the WUSCT is still a valid measure of AED. Loevinger (1998) explains how increased verbal fluency is a consequence of AED growth. As one grows in their ability to perceive complexity and move away from linear causality, this will lead to more detailed responses which can 'mask' as verbal fluency (Loevinger, 1998b; Manners and Durkin, 2001). Therefore, while there is a potential risk that higher responses could reflect verbal fluency, this risk is minimised considering the explanations provided by Loevinger

(1998b). Therefore, the WUSCT can be considered as an internally valid measure of AED with appropriate independence from demographic factors and other psychological constructs.

More recent reviews have also supported the central claims of AED theory and how the WUSCT is a measure of ego and reaffirming its strong internal validity. Manners and Durkin (2000; 2001) review the literature behind these claims and found consistent support for how the WUSCT is a unitary structure, comprising of a broad spectrum of different aspects within a hierarchical structure. Contemporary analysis supports this claim. Lanning et al. (2018) observed how that there were clear and significant differences between each stage of AED and how individuals made sense across a range of different factors, including complexity, emotion and the role others. Therefore, across a significant period, the WUSCT as an internally valid measure of ego has been demonstrated by external reviews.

However, some question whether the link between the WUSCT and AED undermines efforts to establish the ego as a psychological construct. Blasi (1998) describes that the relationship between the AED theory and the WUSCT test as a, potentially, self-fulfilling cycle; that the refinement of measurement tool via the periodic review of the results from the participants' tests does not necessarily improve the external validity of the underlying construct. Also, Costa and McCrae (1993) criticise the over-reliance on the WUSCT within the development of the ego construct:

*It is intellectually dangerous in any science to adopt a single method exclusively, regardless of the apparent success of the method. Contrasting approaches offer new ways of thinking about all problems that are not easily generated within the dominant paradigms. (p.22)*

With the link between AED theory and its measurement, over-reliance on the WUSCT could, therefore, undermine refinement of the AED construct over time.

Despite this concern, this critique is one that reflects psychometrics as a whole and is not unique to AED. According to realist paradigms of research, any psychometric test exploring a given psychological construct will be, to some degree, a representation of the construct and not a direct, one-to-one correspondence to the construct the test is attempting to measure (Vessonen, 2019). This point not only applies to AED but also other psychological constructs such as intelligence (Hampshire et al., 2012) or behavioural assessments (McDonald, 2008). I, therefore, argue that the critiques of Costa and McCrae (1993) and Blasi (1998) are not so much to do with the WUSCT, but



more of a broader question in how we assess psychological constructs when they do not necessarily have a physical location or observable quality.

This perspective places the arguments of Blasi (1999) and Costa and McCrae (1993) in context. Claiming that the WUSCT is a full measure of ego would overstate the evidence provided. However, the consistency in the test-measurement cycle alongside the favourable external reviews (e.g., Pfaffenberger, 2011) and its continued use within the field (e.g., Lanning et al., 2018) makes a compelling case that the WUSCT offers a robust approach to exposing how individuals come to make sense of their external and internal world. It should be considered that the WUSCT and the theory of AED itself is only a representation of ego and cannot claim to provide a direct one-to-one correspondence. However, this is a critique of the field of psychometrics and not unique to the WUSCT and AED.

The WUSCT has also demonstrated itself as a reliable measure of AED. Reliability is *“the stability or consistency with which we measure something”* (Robson, 2002, p.101). Hy and Loevinger (1996) includes several protocols that ensure consistent scoring of the WUSCT.

- The test requires individuals to have suitable psychological qualifications to ensure that the manual is understood appropriately.
- The self-training procedure, included in the manual, provides training exercises and exemplars for using the test. This procedure has been shown to promote consistent and accurate scoring within newly qualified scores.
- Two assessors are required to determine the stage level of each response. The manual outlines detailed instructions for discussing any disagreements between scorers.
- The manual is extensively detailed, outlining both the general principles behind the responses at each stage and many specific examples of the expression of each stage within each sentence stem.

The manual itself has shown itself in the field to produce reliable results. Manners and Durkin (2000) aggregated an inter-rater reliability of 0.8 – which means that for every 10 stems, there were 8 occasions where we scored a sentence stem at the same AED level on the first attempt. These, along with the steps outlined above, suggests that the WUSCT can produce reliable assessments of AED.

### *Alternatives to WUSCT*

Whilst there are alternatives to the WUSCT, the WUSCT was the best place to measure the stage of AED. The Subject-Object Interview (SOI) is one such technique (Lahey et al., 2011). This technique uses a structured interview to investigate how the individual characterises their understanding of the world and how they organise their experience (Berger and Atkins, 2009). Following the interview, a trained scorer assesses the transcript, looking for the underlying structure/hidden assumptions that underpin how they think about the world (Lahey et al., 2011). Akin to the WUSCT, the SOI method also involves using analysis to determine what stage of development the adult resides within. Whilst the SOI is built on a model using different terminology for the developmental stages, the measure also explores the different stages of sense-making and is generally considered comparable to the WUSCT (Snarey, Kohlberg and Noam 1983; Wilber 2000).

A more closely related alternative to the WUSCT are action logic assessments. The first iteration of these assessments, the Leadership Development Profile (LDP) (Barker and Torbert, 2011), was a commercial product for a private consultancy firm. This tool was based heavily on the WUSCT:

- Most of the sentences remained the same. Five of the WUSCT sentences were replaced to increase workplace acceptability (Barker and Torbert, 2011).
- The scoring approach was also similar to that of the WUSCT.

However, the names of the stages and the content within them are considerably different (see section 2.2.5). The tests to determine action logic has had different iterations since Rooke and Torbert's initial study (1998; 2005). The initial developers of this test have since separated from the consultancy firm that holds the intellectual property for the LDP and have consequently developed the Global Leadership Profile (GLP) (Torbert, 2016) and the Maturity Assessment Profile (MAP) (Cook-Greuter, 2011).

Despite these alternatives, I concurred with Pfeifferberger (2011) summarization that WUSCT continues to remain the best choice for researchers in assessing AED. I determined this for three reasons.

*Incompatibility with Loevinger's AED theory:* Although stages are comparable, there are substantive differences in the underpinning theories. Kegan's model is more differentiated concerning stage progression (Kegan, 1982). Cook-Greuter (2004) added new stages to differentiate post-conscientious development. Finally, Rooke and Torbert's action logics have substantively different

content (section 2.2.5), to such an extent that it can be considered a move away from Loevinger's original theoretical concept. As I was interested in measuring the ego as defined by Loevinger, I therefore felt it prudent to utilise the WUSCT given the strong relationship, outlined above, between the test and the underlying theory.

*Accessibility:* Both the SOI and the action logic tests are inaccessible. The SOI would require a 60-90-minute interview, which would have made the approach inaccessible for the busy professional. As a paper test, the WUSCT can be done in the HT/Ps own time and is far less demanding. While the GLP and GMAP are also paper tests, these tests are not publicly available and require a significant fee. The WUSCT, therefore, provided a method that was accessible for both the participants and myself as the researcher.

*Reliability and Validity.* Neither the SOI or action logic tests have the same confidence in their reliability and validity as the WUSCT. There has been no external assessment of the validity of the SOI. Alternative tests, such as LDP (Barker and Torbert, 2011) and the GLP (Torbert, 2017) claim that, by being based on the WUSCT, it can derive the same external assessments of validity applied to the WUSCT. However, such claims are questionable. An essential element of scoring AED stage with the WUSCT is how individual sentences all combine into one test/score. Thus, the WUSCT's strong reliability as a measure is dependent both on individual stems and the test as a whole. By changing a significant number of these sentences, the test becomes compromised. Hy and Loevinger (1996) confirm this, stating how adaptations of the sentence stems impacts upon the validity of the test. Besides, the psychometrics behind all three action logic tests (LDP, GLP and GMAP) have not been made publicly available, and neither have they been subject to external review. It is for these reasons that Pfaffenberger (2011) confirms that these tests are not as strong as the WUSCT for research purposes.

In summary, the WUSCT is a reliable metric for assessing AED which, when compared to alternative measures, balances psychometric strength with accessibility.

### **Assessment Protocol**

The assessment of each of these sentence responses is what determines the AED stage. I scored each test using the instructions outlined by Hy and Loevinger (1996). Each test was scored separately by me and another individual who volunteered their service for the project. We both met the basic requirements of an assessor set out by Hy and Loevinger (1996), which were:

- To undertake the self-training process set out within the manual. We both completed this process. The self-training process has been validated as equal to formally delivered training.
- To hold at least undergraduate psychology degrees. I have a Masters in Psychology and Education, and the other assessor has a Masters in Occupational Psychology. Furthermore the other assessor is an experienced occupational psychologist who has received specialist training to the use of psychometric tools. We both hold Graduate Membership of the British Psychological Society (MBPsS).

Each possible response to a sentence stem has been pre-determined within the WUSCT scoring manual and ascribed an AED stage. The assessor's role is to determine the AED level of each sentence, matching the response of the participant with the pre-determined statements in the manual.

After scoring each participant, the assessors compared the individual stem scores and came to a consensus over any differences at the individual level. AED level is then determined using the ogive rules outlined in Hy and Loevinger (1996). An example of this process can be found in Appendix 2.

### ***3.6.2 Collecting Responses of Headteacher/Principals***

In this section, I will describe how I applied the Critical Incident Technique (CIT) to collect the HT/Ps typical response to incidents within their organisation. I will describe how I utilised the CIT to develop an interview protocol. This interview protocol collected how HT/Ps typically respond to incidents within their settings from the HT/P themselves and those within close proximity to their practice.

In this process, I will discuss how I applied this interview in two ways:

- To collect the HT/Ps response to incidents that occurred within what had happened previously.
- To collect how the HT/P would anticipate responding to an incident. I will explain how I used vignette methods to develop a hypothetical critical incident which provided the incident for individuals to respond to.

#### **Design of the Interview Protocol**

To collect each of the HT/Ps responses, I developed a strict, semi-structured interview protocol (Appendix 3). This protocol was based around the critical incident technique (CIT) (Chell,1998;

Edvardsson and Roos, 2001) and supplemented with insights from Brinkmann and Kvale's and qualitative interview method (2014).

The CIT provides a framework for collecting a detailed description of how individuals respond to a critical event. Chell (1998) describes how the CIT is a way to obtain an understanding of the incident from the perspective of the individual and considering cognitive, affective and behavioural elements. Its ability to provide insights into how individuals both comprehend and respond to incidents might explain its rising popularity in understanding the relevance of psychological constructs to decision making (Butterfield et al., 2009; Wertz, 2014).

After reviewing major texts of the CIT, such as Edvardsson and Roos (2001), Butterfield et al. (2005) and Flanagan (1954), there does appear to be some shared understanding of what a CIT interview should involve. These critical points, outlined below, influenced the design of the interview in the following ways:

*Preparation:* The CIT stressed the importance of preparing the candidates in advance of the interview. Edvardsson and Roos (2001) and Flanagan (1954) stressed the importance of the candidate's memory, and the impact on their capacity to reflect upon the incident. Consequently, I sent a preparation document in advance of the interview (Appendix 4).

*The Overarching Structure:* The CIT technique provided the overarching structure for the interview. Flanagan (1954) outlines that the purpose of the approach is to remove as much subjectivity as possible. According to Edvardsson (1992) and Hughes (2007), one such technique that helps maintain the objectivity is to structure the interview around the timeline of the incident—exploring, in retrospect, the cause, course and outcome of an incident. Therefore, I designed the interview protocol around three stages – before the main incident, during the incident and after the incident had occurred.

*Collecting Information:* The CIT guided collecting information on how the HT/P responded to the incident. Sense-making is all-encompassing (Hauser, 1993), as is complexity. Therefore, I needed guidance to create an interview structure that would allow the interviewee to cover a potentially wide range of topics. The CIT achieves this in two ways:

- The interview has some flexibility within its design. Closed interviews, where questions are predetermined, are not associated with this approach. Instead, data is usually collected in

the form of a semi-structured interview style (Butterfield et al., 2005; Edvardsson and Roos, 2001).

- The typical questions that such interviews can incorporate. Woolsey (1986) describes how this technique can also explore the qualities and attributes of the incident that the participant has observed. Shapira-Lishchinsky (2018) guides how to explore these qualities:
  - Explore how they (the participant) understand the genesis of the incident.
  - To what extent they recognise the context (in this case, prior events) as related to this incident.
  - How did other people's actions affect their behaviours – tapping into their understanding of how others influence them, if at all.

Thus, the CIT approach can help to identify a wide range of contextual variables in the situation, their actions, as well as other people's interactions with them.

However, the CIT method does not itself provide explicit guidance on the design of the technique for exploring the individual's response beyond concrete actions. Flanagan's (1954) original paper on the CIT outlines an approach to collecting the overt behaviour of an individual. While others have adapted the technique for exploring factors beyond overt behaviour, the guidance on how to do this is poor. For example, Herzberg, Mausner and Snydermann (1959), claim to have adapted the CIT to study psychological concepts (e.g., motivation). However, there is little detail provided on how they adapted the CIT framework for this purpose. In a review by Butterfield et al. (2005) of the CIT, they praised the flexibility of the method, without reviewing the main ways in which they adapted the method to explore the application of a psychological construct to a specific scenario. Thus, there is little concrete guidance on how to utilise the CIT approach to identify the interviewee's inner world, such as thoughts and feelings.

For this reason, I decided to augment the CIT framework with other approaches. There were two specific tools that I used to help design questions and an overarching interview protocol that would allow me to engage participants beyond the concrete actions they took. First, I opted to use what Bryman (2016) refers to as a direct question. For example, "*How did this incident make you feel?*" and "*What did you do to obtain further information?*" (Appendix 3). These questions acted as prompts to ensure recording of the full account of headteachers' responses from different angles (thoughts, feelings and actions).

I also drew on the Phenomenological Life Interview (PLI) (Brinkmann and Kvale, 2014) for some of this guidance. The PLI is described by Brinkmann and Kvale (2014) as exploring "*The lived everyday world from the participants ['] perspectives*" (p. 31). The application of PLI in exploring a critical incident supported this research due to its epistemic approach. Brinkmann (2007) explains how we should be prepared to use the interview as an interaction: as opposed to passively recording opinion, that we engage in certain techniques that will encourage the participant to reflect on their responses. Kvale (2007) explains how such interviews might be the first occasion by which individuals come to reflect on an incident. Thus, being prepared to discuss this response and probe further is an important part of the process. I would argue that given how challenging it can be for individuals to label and comprehend the inner world of thoughts and feelings (Singleton and Straits, 2012; James and Crawford, 2014), that the following techniques were critical for me to secure a description of their internal response to the incident that was robust:

- Using a probe, such a theme or topic, as the frame of reference. The probe and the response provided a guide for the conversation. Ensuring that the conversation remained on this topic/probe will be important to help participants ensure their reflections remain focused.
- Following up their initial description with a challenge. Being prepared to challenge participants on their statements. Challenging participants can be done through questioning and responding to the verbal and non-verbal cues given by the participants.
- Seeking clarification. If answers appear to contradict each other, this needed to be clarified. Furthermore, ambiguity, in response to statements, could reflect poor communication or an internal contradiction that could be critical for understanding their experience of the situation.
- Allowing people to change their minds. Through clarification and challenge, people might come to a new understanding of the situation that had not occurred to them previously. Therefore, offering the space for individuals to change their mind and refine their answers is important in collecting a description of their internal world that is reflective of their true response to the incident.

In summary, I used the CIT as the main framework for collecting the I conducted interviews with HT/Ps and those around them. The main strength of the CIT was to be able to collect a rich, descriptive account of their response. In utilising direct questioning (Bryman, 2016) and the PLI (Brinkman and Kvale, 2014) to augment the CIT, I could be more confident that a robust description of the participants' thoughts and feelings could be generated than with the CIT on its own.

## The Interview Protocol

Three days before their involvement started, I sent each participant an email. In this email, I outlined:

- the expectations of their involvement.
- a pre-task that they were to complete before the research started.

For this pre-task, I asked each participant to identify a wicked problem that they would feel comfortable discussing in a telephone interview as a critical incident. The criteria of what defines a wicked problem, taken from Rittel and Webber (1973) were provided. The problem also needed to fit the following criteria:

- An incident that happened in the last three months.
- A typical, day to day, example of a mundane type of wicked problem they would have to face.

The importance of these criteria within the pre-task in supporting research quality is outlined in section 3.9.4.

Due to the different participants involved, I used two interview protocols.

- The first interview protocol involved the HT/P. This interview was conducted in two sections:
  - HT/Ps were questioned on how they constructed their understanding and how they responded to a recalled critical incident.
  - HT/Ps were questioned on a hypothetical critical incident.
- The second interview protocol involved separate interviews with the HT/P's sub-ordinate and line manager. This interview was conducted in three sections:
  - Participants were first questioned about how their HT/P responded to a recalled critical incident.
  - Next, participants were asked how they would anticipate their HT/P responding to a hypothetical critical.
  - The final section discussed how the participants perceived, in general, their HT/P.

I needed to collect the response of the HT/P – actions, organised chronologically, their thought process and how they felt throughout the incident. I, therefore, organised the interview questions around three discrete areas for both the pre-existing and hypothetical sections of the process:



- Thought: I defined thought as to how the HT/P processed the situation, how they comprehended the situation, and what they determined to be critical in shaping their response to the problem.
- Action: What the HT/Ps did to understand the situation and how they chose to respond.
- Feeling: What feelings arose when they heard, comprehended, and acted on the problem. I defined feelings as “*relatively intense, temporary and typically have an identifiable rationale and a definable content*” (Crawford, James and Oplatka, 2018).

The questions for HT/Ps were as follows.

<p>Before/On Presentation of Incident</p>	<p>1) What acts did you take to understand the situation?</p> <p>2) What was your initial plan of action?</p> <p>3) Was there any other people involved within the design or implementation of this action plan?</p> <p>3a) If YES – discuss further in detail</p> <p>3b) If no – what made the h/t develop the plan alone?</p>	<p>9) How did you feel when the situation presented itself?</p> <p>10) How do you think those around you felt?</p>	<p>16) What were your initial thoughts on the situation?</p> <p>17) What do you think was running through the heads of those around you?</p>
<p>During the Incident</p>	<p>4) What actions did you end up taking?</p> <p>6) How did your initial plan of action change over time?</p> <p>6a) If YES – what influenced the change?</p> <p>6b) If no – what made the h/t stick?</p>	<p>11) What was the journey of your feelings throughout the incident?</p> <p>12) How do you think those around you felt during this time?</p> <p>13) Did any of these feelings influence your approach?</p> <p>13a) If YES – what influenced the change?</p> <p>13b) If no – what made the h/t stick?</p>	<p>18) What was your thought process going through the incident?</p> <p>19) What information as particularly important to you in guiding your decision?</p> <p>20) Did your priorities change?</p> <p>21) Were there any other peoples’ thoughts and challenges which particularly influenced you?</p>

			<p>21a) If YES – what influenced the change?</p> <p>21b) IF no – what made the h/t stick?</p>
On reflection:	<p>7) If you could do this again, how would you act?</p> <p>8) Have there been any repercussions on you or others of your actions since?</p>	<p>14) On reflection, how do you feel about the process by which you took action throughout the incident?</p>	<p>22) On reflection, would you have changed the process by which you came to action?</p> <p>22a) If YES – what influenced the change?</p> <p>22b) IF no – what made the h/t stick?</p>

Table 4 Interview Questions for HT/Ps for Recalled Incident

	Theme 2 Behaviour	Theme 3 Feeling	Theme 4 Thoughts
Presentation of Incident	<p>1) What acts would you take to understand the situation?</p> <p>2) What would be your initial plan of action?</p> <p>3) Would you consider the involvement of anyone else within the design or implementation of this action plan?</p> <p>3a) If YES – discuss further in detail</p> <p>3b) IF no – what made the h/t develop the plan alone?</p>	<p>9) How did you feel when the situation was presented?</p> <p>10) How would you think those around you would feel?</p>	<p>16) What were your initial thoughts on the situation?</p> <p>17) What would you anticipate those around you thinking?</p>
Responding to the Incident	<p>4) What actions do you think you might end up taking?</p> <p>6) Would there need to be a plan for change?</p>	<p>11) As you were reading this, what was the journey of your feeling?</p> <p>12) How could you envisage those around you feelings?</p>	<p>18) What was your thought process going through the incident?</p> <p>19) What information was particularly important to you in guiding your decision?</p>

	<p>6a) If YES – what influenced the change?</p> <p>6b) If no – what made the h/t stick?</p>	<p>13) On reflection, did these feelings influence your approach?</p> <p>13a) If YES – what influenced the change?</p> <p>13b) If no – what made the h/t stick?</p>	<p>20) Did your priorities change as you read the text?</p> <p>21) Were there any other peoples' thoughts and challenges which particularly influenced you?</p> <p>21a) If YES – what influenced the change?</p> <p>21b) If no – what made the h/t stick?</p>
On reflection:	<p>7) Following our discussion, if you could do this again, how would you act?</p> <p>8) What could you envisage as the repercussions of the incident?</p>	<p>14) On reflection, how do you feel about the process by which you would anticipate taking action?</p>	<p>22) On reflection, would you have changed the process by which you came to your intended action?</p> <p>22a) If YES – what influenced the change?</p> <p>22b) If no – what made the h/t stick?</p>

Table 5 Interview Questions for HT/Ps for Hypothetical Incident

	Theme 2 Behaviour	Theme 3 Feeling	Theme 4 Thoughts
Before/On Presentation of Incident	<p>1) What acts did the h/t take to understand the situation?</p> <p>2) What was their initial plan of action?</p> <p>3) Was any other people involved within the design or implementation of this action plan?</p> <p>3a) If YES – discuss further in detail</p> <p>3b) If no – what made the h/t develop the plan alone?</p>	<p>9) What emotions did the head teacher demonstrate when the situation presented itself?</p> <p>10) Was the head teacher aware of how others were feeling??</p>	<p>16) In what ways, if at all, did the h/t communicate his thoughts on the incident to you?</p> <p>17) Was the head teacher aware of how others were thinking??</p>

During the Incident	<p>4)What actions did they end up taking?</p> <p>6)How did their initial plan of action change over time?</p> <p>6a)If YES – what influenced the change?</p> <p>6b) IF no – what made the h/t stick?</p>	<p>11)How did you perceive the heads emotions throughout the incident?</p> <p>12) Was the head teacher aware of how others were feeling??</p> <p>13)Did any of these feelings influence his approach?</p> <p>13a)If YES – what influenced the change?</p> <p>13b) IF no – what made the h/t stick?</p>	<p>18)What was their thought process going through the incident?</p> <p>19)What information appeared to be most influential on the head teacher?</p> <p>20) Did their priorities change?</p> <p>21) Were there any other peoples’ thoughts and challenges which particularly influenced the headteacher?</p> <p>21a)If YES – what influenced the change?</p> <p>21b) IF no – what made the h/t stick?</p>
On reflection:	<p>7) If you could do this again, how do you wish the head teacher acted?</p> <p>8)Has there been any repercussions on you or others of their actions since?</p>	<p>14) On reflection, how do you feel about the process by which the head teacher took action throughout the incident?</p>	<p>22) On reflection, how would you evaluate how the headteacher went about the process of addressing the incident</p>
	<p>Theme 5: Reflection of perception by others/themselves</p> <p>1) How do you feel the critical incident was perceived by the head teacher?</p> <p>2) Was the head teacher responsive to how the team was perceiving the head teachers actions?</p>		

Table 6 Interview Questions for Those Around HT/P for Recalled Incident

	Theme 2 Behaviour	Theme 3 Feeling	Theme 4 Thoughts
Presentation of Incident	<p>1) What acts would you anticipate the headteacher would take to understand the situation?</p>	<p>9) What emotions would you anticipate the head teacher demonstrating in this situation?</p>	<p>16) In what ways, if at all, would the h/t communicate their thoughts on the incident to you?</p>

	<p>2) What would be anticipate to be their initial plan of action?</p> <p>3) Would they consider the involvement of anyone else within the design or implementation of this action plan?</p> <p>3a) If YES – discuss further in detail</p> <p>3b) IF no – what made the h/t develop the plan alone?</p>	<p>10) Would you anticipate the head teacher being aware of how others could be feeling</p>	<p>17) Do you think the head teacher would be aware of how others were thinking??</p>
Responding to the Incident	<p>4) What actions do you think you might end up taking?</p> <p>6) Would there need to be a plan for change?</p> <p>6a) If YES – what influenced the change?</p> <p>6b) IF no – what made the h/t stick?</p>	<p>11) How did you perceive the headteachers emotions throughout the incident?</p> <p>12) Would the head teacher be aware of how others were feeling?</p> <p>13) Would any of these feelings influence his approach?</p> <p>13a) If YES – what influenced the change?</p> <p>13b) IF no – what made the h/t stick?</p>	<p>18) What would you think their thought process would be going through the incident?</p> <p>19) What information would you think would be most influential on the head teacher?</p> <p>20) Would their priorities change?</p> <p>21) Could you envisage any other peoples' thoughts and challenges which could be particularly influenced the headteacher?</p> <p>21a) If YES – what would influence the change?</p> <p>21b) IF no – what would make the h/t stick?</p>
On reflection:	<p>8) Could the headteacher envisage any repercussions of the incident?</p>	<p>14) If this was a real incident, how do you feel about the process by which the head teacher took action</p>	<p>22) On reflection, how would you evaluate the headteacher and how they went about the</p>

		throughout the incident?	process of addressing the incident
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Table 7 Interview Questions for Those Around HT/P for Hypothetical Incident

To help guide me and ensure that I followed the produced, I produced a detailed protocol. This protocol is presented in Appendix 3.

I utilised the same question format within the hypothetical critical incident. Utilising the same question framework had practical benefits; it was easier to compare themes from across the recalled incident and hypothetical incident. Furthermore, participants were clear on the expectations of each question. The simplicity of the task facilitated the participant to focus on the response rather than comprehending the question. Across these areas, I felt I could capture a rich, descriptive account of how each headteacher typical interacts with a wicked problem.

### 3.6.3 Designing the Hypothetical Critical Incident

As part of this process, I also asked participants to consider how they would anticipate responding to a hypothetical critical incident. In this section, I outline my approach to designing the hypothetical critical incident, loosely based on the vignette method, which I adapted to enhance research quality.

#### Conceptualisation and Rationale

In designing the hypothetical critical incident, I utilised literature from the vignette method. Finch (1987) describes the vignette method as producing an incident/problem that is “*short stories about hypothetical characters in specified circumstances, to whose situation the interviewee is invited to respond*” (p.105). These pre-designed stories are written within a context familiar to the participant (Schoenberg and Ravdal, 2000).

There are several reasons as to why the vignette method approach heavily influenced me in creating a hypothetical critical incident. The first reason is that the vignette method can collect rich description across the whole incident. Barter and Renold (1999) recognised that the vignette method could collect views, beliefs and understanding about a specific task. Miles (1990) described how this method could encourage participants to go beyond simply describing a factual account – they can generate feelings, reflection and critical thinking. Finally, they have the potential for individuals to discuss responses or actions, such as any errors or decisions that might otherwise be against best practice or deviate from guidelines, that might be embarrassing for participants to

admit in a more intensive method (Sampson and Johannessen, 2020). Across these three sources, the vignette method has the potential to go beyond a simple, idealised description of how people might respond, but can also access people's thoughts, reflections and intended actions regardless of social desirability.

The second reason is that the vignette method has been used previously for similar purposes. One of the purposes of the vignette method is to assist in determining the extent by which a psychological construct (AED) can help to understand how individuals interact with their context and those around them. There are many examples of the use of the vignette method in collecting data that achieve similar goals. For example, some of these psychological constructs include moral reasoning (Knutson et al., 2010), attitudes and awareness (Schoenberg and Ravdal, 2000), exposing underlying beliefs of individuals (Hughes and Huby, 2004) and studying individual decision-making processes (Taylor, 2006).

There are also examples of the vignette method being used to explore how individuals respond to leadership problems. For example, Wepner, Wilhite and D'Onofrio (2011) used the method to explore how deans of education problem solved in organisational dilemmas and studied the motivation and performance of participants. Kirkland and Baur (2016) used the vignette method on 56 school leaders to determine the extent to which educational advocates influenced the decision they would make around the child's educational provision. Therefore, there is a relatively good history of this method being used in both leadership and psychology to elicit the response of individuals to particular tasks.

In summary, the use of the vignette method to acquire a rich description of the HT/P's responses to organisation tasks is an appropriate choice. In the next section, I will outline how I used and adapted the vignette method to develop a hypothetical critical incident.

## Design of Problem

Most vignette methods place a central role on the research team to develop content. Hughes and Huby's (2004) review of this technique suggests that writing the incident from the research team's experience is the most common method for its development. Then, the research team would typically make use of a small cohort of professional individuals to confirm the validity of their incident. Bradbury-Jones, Taylor and Herber (2014) also suggest the central role of the research team; while interviews and real-life experiences might be sought out for context and content, the research team themselves are the ones who attempt to craft a vignette.

However, I believe that relying on the research team in this way has limitations. Namely, achieving a hypothetical critical incident that an HT/P and school staff view as applicable to their setting is crucial. In Finch's description of the vignette methods (1987), the hypothetical wicked problem I developed must represent typical, day to day occurrences that reflect the lived reality of participants. As I am not a practising HT/P, I would argue that my lack of experience within school leadership would limit any attempt to write an incident. Thus, the problem could have been an inaccurate or inappropriate representation of typical school activity. If HT/Ps do not recognise the task as a legitimate scenario within their organisation, this could affect the extent that they interact with the hypothetical critical incident and therefore impact upon the dependability of the themes generated.

Furthermore, there is a recognition that utilising participants to validate the incident designed might not be enough to ensure that the product is considered an applicable example in the eyes of practitioners. Spalding and Phillips (2007) noted the need to "*pledge to myself that my vignettes [hypothetical wicked problem] would be trustworthy*" (p. 955) even upon checking the incident with a trial group. Also, Gould (1996) and Hughes and Huby (2004) all note that, despite the use of a referral group in the confirmation stage, concerns over internal validity can remain. Thus, the traditional methods of using participants for validation might not go far enough in ensuring that the product is a representative example of what an HT/Ps could expect to face.

Therefore, to produce a hypothetical critical incident that each HT/P could relate to, I decided to develop these incidents through a different approach. Instead of school staff being used to validate the incident, I utilised them to design the incident itself in an approach I have called 'Co-Construction'.

### Co-Construction

I invited HT/P's and other school-based leaders to six regional workshops across the North and South of England, advertised via social media and my employer's network of partner schools. Between four and six individuals attended each workshop.

The purpose of each workshop was for school staff to create a hypothetical critical incident that was an example of a wicked problem that they would likely observe within their setting.



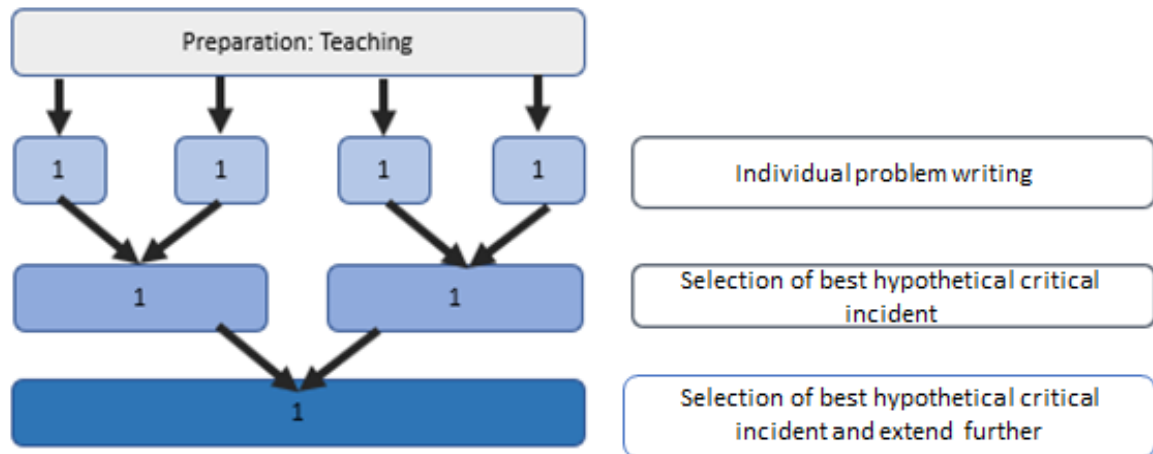


Figure 2 Summary of Design of Hypothetical Critical Incident within Workshops.

The workshop protocol was as follows:

- A wide range of locations were selected across the UK (Sheffield, Manchester, Bath, London, Gloucestershire) to capture the broadest range of experiences and systems as possible.
- In these workshops, I taught participants about Loevinger's (1998) AED theory.
- Following this, I introduced the main task. I outlined that we would develop a hypothetical critical incident within the group that reflects a wicked problem that could occur within a typical school setting.
- I outlined the main features of these wicked problems so that the school leaders could be clear about the types of problems that they should identify for potential use. Therefore, to reinforce the features of the wicked problem, non-education examples were provided. I used these examples to highlight the features of what made these situations wicked. The use of non-education examples was deliberate - I was mindful that providing education-specific examples could prime participants and prevent them from generating their own examples.
- Each participant identified a wicked problem they felt met the criteria and wrote this out.
- I placed participants into two groups. Within their group, they would read each other's individual attempts of a critical incident. They would agree amongst themselves which of the three attempts was the best example of a wicked problem that is most likely to occur within their organisations.
- If there were more than two groups within the workshop, the following procedure was followed. The groups would merge, read the two selected hypothetical critical incident and

then the group would decide which of the two was the best example of a wicked problem that is most likely to occur within their organisations.

- After selecting the final hypothetical critical incident, the group would, as a team, extend the incident further; this could be refining some of the wicked features within the task, or adding extra details that would increase transferability.

These workshops generated three primary and three secondary hypothetical critical incidents. A basic thematic analysis, using the features of a wicked problem as a template, was used to establish the common themes across these six critical incidents (Clarke, Braun and Hayfield, 2015). I used thematic analysis to construct the final hypothetical critical incidents. I returned the critical incidents to the HT/Ps involved in the focus groups, and further feedback was requested and incorporated. This final step was important for transferability – this meant that each hypothetical critical incident was based on a range of experiences from across the country and not just those of a specific regional group.

Following feedback from HT/Ps that the topic of the task might be different between primary and secondary settings, I produced two hypothetical critical incidents. I produced one for HT/Ps in primary settings and another for HT/Ps in secondary settings. These can be found below and in Appendix 5.

### **Draft Vignette for Primary Headteacher/Principals**

You are the headteacher of a suburban primary school. You have been in post for 4 years. The school has a mixed intake of relatively affluent and disadvantaged students, however, the area is calm and friendly. The school has had a good Ofsted grade for over 15 years. The pupil roll is good and there is low staff turnover.

Your school administrator has just finished compiling the daily attendance records. In the report, you notice that two brothers, X and Y, have not come into school. This is the third consecutive Monday in which both brothers have not attended. As with the previous incidents, no prior warning had been sent to the school.

The last name is familiar to you. You realise that these are the children of a parent governor. You know her reasonably well – she has served a parent governor throughout your headship.

You leave your office to find the deputy head teacher as they hold the responsibility for pupil welfare. When you inform him of X and Y absence, he reports that he noticed at the last governors meeting, the parent was “carrying the weight of the world”.

You go to speak to the classroom teacher. She is unaware of any possible reason for this absence pattern and the children seemed fine to her.

When you come back to your office, the school office want to know how you would like to proceed. She reminds you that that local authority policy on attendance is that you would be expected to take further action, up to and including a fine.

### Draft Vignette for Secondary Headteacher/Principals

**You were appointed as headteacher to a suburban secondary school 6 months ago. Pupil roll is strong and staff turnover is low. The school has been consistently good for the past 8 years.**

At 4pm, you receive a phone call from a parent complaining about a teacher who has “shouted at a child in class”. On the phone, the parent started to cry and was upset by the incident.

The child and parent are both known to you. In the past 3 months, after facing significant difficulties at school and home, the child received a diagnosis of ADHD from the local Child and Adolescent Mental Health Service.

You call in your deputy headteacher. The deputy headteacher, like most of the senior leadership team, have served at the school for the past 3 years. They recalled a complaint from 2 years ago that was raised against the same teacher, 2 years ago. However, in investigating that incident, due process was not adhered to. As a result, the complaint was dropped and no further action was taken.

The school has a 48 hour policy. In this policy,

- You have 48 hours to investigate and subsequently write to the parent, informing them that you have conducted an investigation and that you have decided the next steps.
- The policy recommends that you delegate the responsibility for the investigation to another member of the senior leadership team.

### ***3.6.4 Summary***

In this section, I have outlined the data collection tools employed in this research. The WUSCT is a reliable and robust psychometric assessment of ego development. I have described how I have followed the procedures outlined by Hy and Loevinger (1996). I have explained how I collected the rich description of each HT/Ps practice through recalled and hypothetical critical incidents. Finally, I have outlined how I involved HT/Ps in the design of the hypothetical wicked problem and why this was important to the research.

## **3.7 Research Procedure**

In this section, I will outline how I conducted the research. There were six discrete stages.

### ***3.7.1 Stage 1 of Research Procedure***

This stage involved preparation for the research. Preparation involved:

- Development the hypothetical critical incident (see section 3.6.3 for protocol).
- Initial practice interviews to test out the interview procedure and practice AED assessments using the WUSCT.
- Recruitment of participants (See section 3.5).

### ***3.7.2 Stage 2 of Research Procedure***

Following the selection from the initial pool, I formally invited HT/Ps to take part in research by email. This email (Appendix 4) included:

- What involvement in the study would require.
- An ethical clearance form that I requested participants complete and return to me in advance of agreeing to the project.
- Advanced instructions for the interview.

The direct contacts of someone they line manage (e.g., a Deputy or Assistant HT/P) and their line manager (I suggested that an appropriate individual for such a task would be the Chair of the governing body). I then proceeded to contact these individuals separately to seek clearance for their involvement and for appropriate dates to meet and conduct the research. It was made clear that this date only needed to be convenient to them and did not necessarily need to occur on the same day as other participants.

### ***3.7.3 Stage 3 of Research Procedure***

Stage 3 involved collecting the rich description of how HT/Ps typically respond to organisational complexity and wicked problems within their organisation and how those around them typically responded to the HT/Ps. This interview procedure, as outlined in section 3.6.2.

### ***3.7.4 Stage 4 of Research Procedure***

The next stage involved collecting the information required to assess each HT/P's stage of AED. HT/Ps completed the Washington University Sentence Completion Test (WUSCT). The purpose of this test was to provide the data required to assess their stage of AED. HT/Ps had one working week to complete the test, which they were asked to email back to me via secure email.

### ***3.7.5 Stage 5 of Research Procedure***

Stage 4 was the analysis of the data for each unit (a unit comprises a headteacher, their direct report and their line manager) for common themes on how the HT/P typically responded to critical incidents. After completing this procedure, I assessed the HT/P's stage of AED according to the protocol outlined in the manual for the WUSCT test. I then compared the themes across HT/Ps that shared the same stage of AED.

### ***3.7.6 Stage 6 of Research Procedure***

I emailed all HT/Ps after the data analysis was complete to provide feedback on their AED stage, and the results from the research (Appendix 6). I also offered each participant three, one-hour coaching sessions to discuss their results and how they might implement this new knowledge into their practice. Details of this coaching process and any outcomes are not included in this thesis

## **3.8 Data Analysis**

There were two strands to the data analysis procedure. The first was in the assessment of the WUSCT data. This procedure followed the protocol set out by Hy and Loevinger (1996), and I describe this briefly in the section 3.8.1. The second strand was to analyse the data from the interviews with HT/Ps and those around them to determine the key patterns within each stage of AED. For this strand, I heavily relied upon Miles and Huberman's (1994) approach to data analysis. In section 3.8.2, I outline the rationale for this choice, with the remaining sections outlining how I applied the guidelines of this approach to data analysis.

### ***3.8.1 Assessment of AED***

In assessing each HT/P's stage of AED, I used the WUSCT 2<sup>nd</sup> Edition (Hy and Loevinger, 1996). I followed the strict protocol, outlined in section 3.6.1, to determine the stage of AED of each HT/P.

Critically, I only undertook this procedure once I had completed all data collection and analysis of the interviews outlined in sections 3.8.2. Consequently, I was unaware of each participant's stage of AED throughout primary data collection and analysis. I explain the importance of this to research quality in section 3.9.

In the initial assessment of each sentence stem, the agreement scores between myself and the second AED assessor was 0.88. This agreement score is higher than the average inter-rater reliability of 0.80 typically achieved in using the WUSCT (Manners and Durkin, 2000).

The remaining sections are committed to exploring how I analysed the interview data from each participant. I will first explain the rationale for utilising Miles and Huberman (1994) as the main guiding framework in my data analysis. Subsequent sections will outline how I applied this approach.

### ***3.8.2 Rationale for Miles and Huberman (1994) as Main Approach for Interview Data Analysis***

There were three reasons why I used the work of Miles and Huberman (1994) as my main framework for data analysis. The first reason is a shared research philosophy. As stated in section 3.3.1, I have grounded this research in critical realism (Maxwell, 2012). Miles, Huberman and Saldana (2014) have also identified their approach as being situated within realism. They accept that that non-physical entity exists beyond people's perceptions and constructions, i.e., are ontologically real (section 3.3.1). This alignment is important to ensure that the data and subsequent findings are consistent.

The second reason was the alignment of Miles and Huberman (1994) to the research questions within this project. Huberman, Miles and Saldana (2014) state that their analytical methods seek to establish "*a social process, a mechanism or a structure at the core of events*" (p.7) that can describe what is happening to cause said events. Robson (2002) confirms their self-reflection, which describes the purpose of the method as establishing a "*causal explanation and for evidence showing that each entity is an instance in that explanation*" (p.475). The purpose of this thesis, as evident in the research questions presented in section 3.2.2, is to establish the extent to which AED shapes the comprehension and response of HT/Ps within specific contexts. Hence, there is considerable

alignment behind the purpose of this research and the purpose of these data analysis methods, making Miles and Huberman (1994) a good choice for sourcing consistent responses to this projects' research questions.

Finally, I considered that the structured approach of Miles and Huberman (1994) supports novice researchers, such as myself, within the field. There is a broad recognition within the field that the approach outlined by Miles and Huberman (1994) follows specific stages, with set actions to be undertaken within each stage (Miles, Huberman and Saldana, 2014). As an early career researcher, I recognised that my experience in handling complex data sets was limited. Using a standardised, formulaic approach would, therefore, increase the quality of the findings. I discuss on how this approach enhanced research quality more broadly in section 3.9.

Following this rationale, I will now outline my data analysis procedure.

### 3.8.3 Procedure

I have summarised the data analysis procedure in Figure 3.

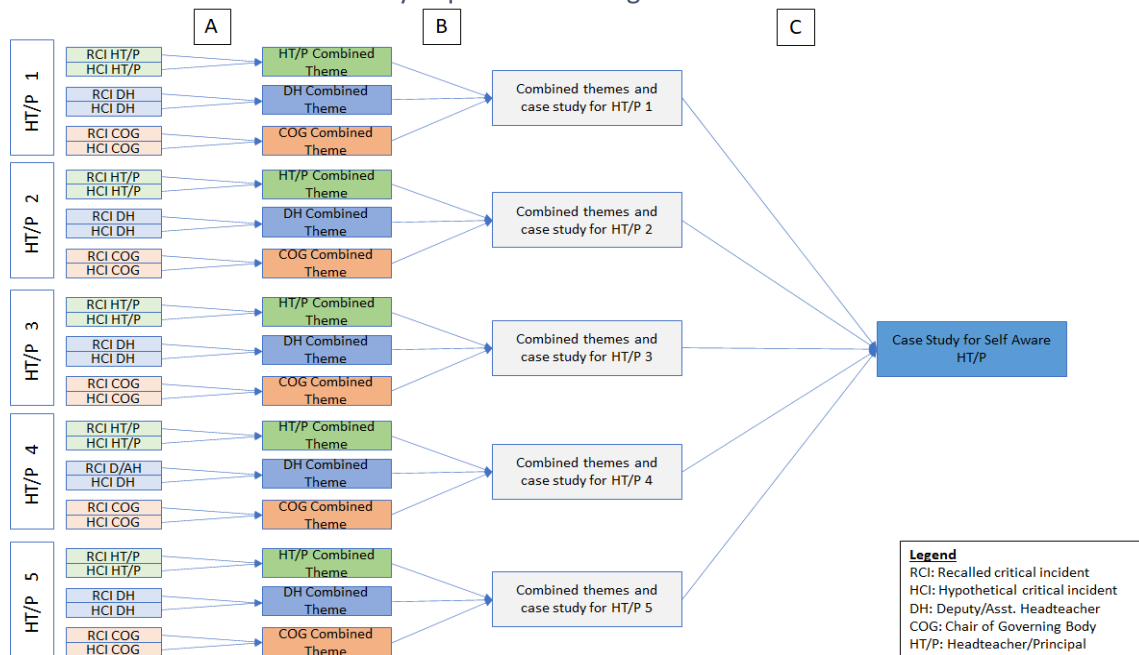


Figure 3 Diagrammatic Representation of How Themes Were Generated from Individual Data Sources.

Figure 3 demonstrates that there were three discrete stages to the data analysis. The first stage was to identify key themes that emerged from each single source of data. These single sources of data were how the HT/P, Chair of Governors and Deputy HT/P interviews on the recalled and hypothetical critical incidents.

The second stage was to establish the common themes across different data points:

- a. Step 1. To establish the common themes across a single source – HT/P, Chair of Governors and Deputy/Assistant HT/P.
- b. Step 2. To establish the common themes across a single unit. A single unit comprised of a HT/P, their line manager and their direct report.
- c. Step 3. To establish the common themes across units within the same stage of AED.

The third stage was to review the final themes for consistency, validity and clarity.

In performing the coding, I opted to use a computer-aided qualitative data analysis package. For this investigation, I selected Dedoose. I opted to use an electronic system for two reasons.

1. First, to visualise patterns across memos and codes that emerged from the data. Many individual pieces of data and participants involved in the project generated a large number of first cycle codes. The use of Dedoose kept the codes from multiple sources in one place and made it easier to see links between codes and to establish second cycle codes from the first cycle.
2. Secondly, to visualise themes that have emerged consistently across the group. Dedoose automatically generated a matrix of code frequencies and co-occurrences according to a given descriptor (e.g., figure 6). In this case, by applying the AED descriptor, I could visualise what codes were common within a specific stage of AED, and therefore establish the themes that emerged consistently across individuals within a specific group.

### ***3.8.4 Performing Stage 1 of Data Analysis Procedure***

To identify the key themes within a single data source, I conducted a data reduction exercise. The data reduction exercise is a procedure which aims to reduce the amount of irrelevant or misleading data, which facilitates focus on the key ideas and meaning from the text (Miles, Huberman and Saldanna, 2014). I did this by moving from the first cycle to second cycle coding.

#### **First Cycle Coding**

I established first cycle codes using a combination of a-priori and in-vivo coding to overcome the challenges of analysing data within this project. A-priori coding refers to setting up a series of codes before data analysis (Robson, 2011) while in-vivo coding is a procedure used to allow the codes to emerge from the data (Corbin and Strauss, 2008).



To establish a set of a-priori parent codes, I was influenced by Saldana (2015) and his recommendations for first cycle coding categories. Based on his work, I developed the following categories to establish the action, thought and effect of HT/Ps within these incidents.

- Action. The purpose of this coding category was to establish the actions that the HT/P would take. The definition of codes in this category was to collect the concrete, tangible changes to the environment that the headteacher delegated, requested or did themselves in response to the demands of the task.
- Interpersonal and Intrapersonal Feelings. In this coding category, I sought to collect the feelings of the HT/P (intrapersonal) and how they considered, or responded to, the feelings of others (interpersonal).
- Simple Process. This coding category looked to establish *how* the HT/P attempted to comprehend the situation. The category included the coding of people they spoke to, the information they requested and the degree of exploration they undertook with those around them.
- Conceptual Process. The conceptual process category attempted to establish the HT/P's thinking process. This thinking process could be shared with those around them, the internal monologue which they shared during the interview/written task or both.
- Perception of HT/P. This coding category collected how the headteacher was perceived by those around them. Consequently, this coding category did not include any observations from the headteacher.

These coding categories provided the template to generate in-vivo codes. As I reviewed the transcriptions, I created codes from the data and then reused these codes as appropriate.

The guidance provided by Saldana (2015) in developing in-vivo codes was limited to a few sentences and examples of in-vivo codes. To provide greater structure and enhanced dependability, I sought out a more structured way of conducting this form of coding. It was for this reason that I utilised Corbin and Strauss's (2008) guidance on open coding to help facilitate my approach to developing in-vivo codes.

The open coding process guided me in generating in-vivo codes in three ways:

1. Codes emerge directly from the data without reference to a-priori theory. When codes emerge directly, the codes are taken directly from how the HT/P responded to the task.

2. Open coding should involve looking at the properties of each code (Robson, 2011). This technique encouraged me to look at how I defined each in-vivo code, the properties of each code and how they fit within each predetermined category.
3. Constant comparison. This process is a cornerstone of the data analysis approach outlined by Corbin and Strauss (2008). In this technique, when the analyst creates a new code, they should go back through the evidence so far to check whether this new code could have been applied elsewhere. This technique encouraged me to evaluate each code as I moved through the data, adjusting the code as required so that it is representative of the data.

A coding tree which emerged from the first cycle coding is in Appendix 7.

### Second Cycle Coding

Saldana (2012) describes second cycle coding as the process of building connections between the first cycle codes. Therefore, the purpose of the second cycle was to establish a set of pattern codes that could summarise and explain how the headteacher would respond and how they were perceived by those around them. Figures 4, 5 and 6 outline an example of how first cycle codes formed a pattern code.

SPS Did not share thoughts behind action	Thinking/rationale behind actions not shared
SPS internal thinking porocess	
Private Thinking	

*Figure 4 Example of Formation of Second Cycle Code*

In Figure 4, we can see that the parent category (e.g., Action, thought, feeling) is still active from the first cycle. The parent category provides a focal point for the analysis. I aggregated the first cycle codes under an observation that has linked these codes together, e.g., in Figure 4, the three child codes have been linked together under the pattern code “Thinking/Rationale Behind Actions Not Shared”. This example demonstrates how the insights and descriptions from the first cycle of coding have gone on to inform the second cycle. This process reduced the data down to manageable themes.

Manipulation	Leverage/Manipuation of Others/
cog collaborating to get what i want	
cog playing a game to achieve outcome	
sps empathy as a tool	
sps pulls on personal situation	
"understanding people to get what I want"	
sps leverage/manipulation	
INVOLVE OTHERS: Leveridge	

Figure 5 Example of Formation of Second Cycle Code from Different Areas within the Coding Tree

In this second example (Figure 5), these first cycles codes from across different areas within the coding tree were brought together into the pattern code of manipulation/leverage.

Three techniques facilitated the production of pattern codes. These techniques were:

- Coding frequency.
- Coding co-occurrence.
- Writing memos.

### Coding Frequency

Utilising coding frequency and co-occurrence is a relatively common feature of qualitative analysis (Robson, 2011; Cohen, Manion and Morrison, 2007). Coding frequencies count the number of times that a code has appeared within a data source. This technique helped identify any codes that had been particularly dominant within the data.

INVOLVE OTHERS: Feedback	Development of the person/coaching/providing feedback
Developing The Person	
sps developing others	
SUPPORT&HELP: Coaching	Provide Support
SPS- provide support	
SUPPORT&HELP: Customer	

Figure 6 Example of Using Coding Frequency to Identify Key Themes

Figure 6 is an example of this technique. The codes within the parent category were common within this individual data set. From this, I could begin to deduce that Development was a specific priority for those within the Individualist stage. I could then corroborate this with other examples from other headteachers to see if this were a common theme within the AED stage group in subsequent phases.

### Code Co-occurrence

Code co-occurrence tables are produced automatically within the Dedoose software. They display when codes have crossed over or co-occurred within the same place and how often this has

happened. Users of the software can then click on the frequency to see the specific incidents of co-occurrence and explore the possible meaning behind it.

Figure 7 is an example of this use of code co-occurrence.

	COMPLEX Decision made on own	COMPLEX planning	COMPLEX seeking immediate	COMPLEX seeking outside
Information Gathering: "How are they within themselves"	1	0	0	0
Information Gathering: "What do you think"/informal insights	0	0	0	0
Information Gathering: Across Organisation	0	0	0	0
Information Gathering: Evidence/Data	5	0	4	0

Figure 7 Example of Using Code Co-Occurrence Tables

In this single data source from a headteacher within the Self-Aware stage, information gathering evidence/data co-occurred with codes suggesting the individuals made decisions on their own. Further examination of the examples within this co-occurrence suggested that the information would be used to inform the HT/Ps decision, which they would make on their own. In addition, this code also occurred at 'seeking immediate' code. Further exploration suggested that the evidence they would seek would be about the situation itself and not the context or history of the event.

Both examples were then written up in a memo and used within the matrices to compare against insights from other sources.

### *Producing Memos*

Producing these pattern codes was facilitated by the process of creating memos. The purpose of memos, according to Bryman (2016), is to record the observations, patterns and insights acquired in the process of data collection and the coding process.

Writing memos was vital in several ways. The process of writing memos throughout the analytical process supported me in recording ideas for relationships between codes, as I engaged in the process of data analysis. Furthermore, memos could capture the nuances that coding might miss. For example, in section 4.4.5, I will outline how Individualist HT/P made those around them feel heard. This idea emerged through the following memo "*Deeper relation/impact than being described as listener*". This memo prompted me to set up an in-vivo code, 'Heard not Listened', which

attempted to capture how those around the individualist headteacher would respond to them in this nuanced way. I then went back through the examples of individualist data to see if I could observe this code elsewhere. The coding frequency, demonstrated in Figure 8, demonstrated how this initial memo supported me to uncover this observation.

	Individualist	Consci	Self Aware
exp listens alot			
exp listened to	8	4	0
exp "Heard not Listened"	8	0	0

Figure 8 Example of the Use of Code Co-occurrence with Memos to Form Themes

This example of creating memos demonstrates the nuance of within the data. Critically, the density of the coding in the first cycle (section 3.8.3) could have made it very easy to lose these emerging observations. The difficulty in identifying these emerging observations on individual HT/Ps would have been even harder to maintain, given that (as recommended by Miles, Huberman and Saldana, 2014) coding and data collection were interspaced processes.

These memos were reviewed within each case and generated a series of themes, which were used to confirm or challenge in-vivo codes between phases of analysis.

### Summary

Data reduction allowed me to discover the key themes within each piece of data. The next stage was to see how the themes from individual data sources were common across the individual, the unit (HT/P, line manager and direct report of the same school) and then across HT/Ps within the same stage of AED.

### 3.8.5 Performing Stage 2 of Data Analysis Procedure

To establish common themes across different sources of data, I needed an approach that would allow me to see the themes that had occurred in one data source and compare them to other sources. To complete this, I used an approach called data display, which uses tools to expose the key themes that emerged from the first stage of data analysis (Miles and Huberman, 1994).

My primary data display technique was to use matrices. I chose the matrix as this made it easy to compare different cases. I used matrices to:

- Identify the common themes that emerged across the pre-existing and hypothetical wicked problems interviews from each individual (Point A, Figure 3).

- To compare the common themes across the three individuals within a single unit (Point B, Figure 3). This matrix allowed me to establish the common themes within each single unit.
- Look for the common themes across the cases within each AED group.

Figure 9 shows an example of a matrix for summarising the key themes from within each matrix, and for removing themes not observed within the other data set.

RCI H013	HCI H013
Gathers other around them	
Spoke to variety of other people -	Speaks to others – DH, HoG Other Teachers, Cleaner
Mutuality	Mutuality
Emotion	Emotion – “this will hurt them; we need to be careful” The problem solve I need others
To Problem solve I need others	
The needs of the whole person – holistic	“what’s going on from them and their family for this to happen”
Complexity – what’s going on here, what’s underneath the surface	Wanting people’s interpretation “what do they really think?”
History referred to – what happened before,	Requesting recollections of incident from those around them
Need to think	Need to think
Beyond now and wider	Beyond now and Wider
Planning conversation with others	Checking the policy briefly
“I enjoy situations like this – its what we come into the job for”	<del>Mindmapping reasons</del>
“What have I done in the past?”	<del>Whats the cause of this?</del>

Figure 9 Example of Using Matrix Method to Form Themes

Each cell within the matrix comprises a range of data. Each matrix cell contained four sub-sections: actions, thoughts, feelings and how others perceived them. This process acted as a way of capturing how the HT/P responded to the whole event. Code frequencies, generated from the data reduction stage of the analysis process, were manually accumulated throughout each sub-section of the process. I complemented code frequencies with rich examples from the data as well as insights from memos.

Using both coding frequency and rich examples from the text allowed me to strike a balance between the cold, hard facts of number with the iterative, informal pattern generation that I could

acquire through memos and rich examples. These were wicked problems rich in nuance. So, having a balanced perspective on analysis was important to capture these details. Writing memos was a crucial part of extracting meaning from this process. In the transition between each matrix point (A, B and C as outlined in Figure 3) writing memos acted as a record for emerging the patterns and insights. I could, therefore, audit trail my analysis process, which was an important part of ensuring the data was of sufficient quality (section 3.9).

I followed the same process to establish how those around them perceived each HT/P. The only difference was that I could not include the data from the HT/P directly. Hence, this theme only relies upon the data from the Deputy HT/P and Chair of governors from each case.

### Data Validation

Working through the systematic process outlined in this section acted as the main mechanism for concluding the data. Each subsequent matrix eliminated themes that did not appear consistently across the different individuals or cases. Thus, the themes that emerged at the end had appeared consistently across each case within the AED group. As discussed in the previous sections, I built each case upon themes that were consistently generated across different individuals and tasks. In addition to this process, I worked back through the memos and codes to assess if each theme could be traced through the memos and codes initially generated.

### *3.8.6 Summary*

The data analysis process involved three stages: data reduction, display and validation. In the first cycle of coding, I made use of a pre-determined coding framework to focus the data reduction process, utilising ideas from Saldana (2015). Unsatisfied with the lack of guidance on in-vivo coding, I incorporated Corbin and Strauss's (2008) guidance on open coding to help me in identifying core themes from each piece of data. I generated pattern codes within the second cycle coding process. To generate these pattern codes, I made use of coding frequencies, coding co-occurrences and memos. I used data display techniques, namely matrices and coding frequencies, to establish the common themes across individuals, units and those within the same stage. This systematic process acted as a mechanism for validating the data.

## 3.9 Research Quality

In this section, I will outline the steps I undertook to ensure that the research and its findings were of sufficient quality to generate meaningful contributions to the field. First, I will define research quality utilising Lincoln and Guba's (1985) evaluative criteria for research quality. Each subsequent section will demonstrate how I have fulfilled Lincoln and Guba's criteria.

### *3.9.1 Defining Research Quality*

The traditional techniques associated with establishing reliability and validity, from a pragmatic perspective, provide inappropriate guidance for a research project largely utilising qualitative data. For example, validity is to the extent to which we measure what we claim to measure (Robson, 2011). The specific suggestions for establishing validity, includes factor analysis and other statistical techniques. However, Lincoln and Guba (1985) argue that none of these tools apply to qualitative work. I am trying to develop a detailed, qualitative description of how HT/Ps within AED stages comprehend and respond to the complexity and wicked problems within their organisations. Thus, in establishing whether any description is a valid representation of an HT/P response, the terms outlined above would not be applicable.

I have chosen to use Lincoln and Guba's (1985) evaluative criteria for establishing research quality within qualitative work. I chose this framework because the criteria are commonly used within the qualitative domain (Sale and Brazil, 2004; Johnson and Rasulova, 2016). Pragmatically, when compared to traditional definitions of validity, I found their suggestions for supporting each of the following criteria a useful guide to enhancing the research quality of my work.

The four criteria, summarised from Lincoln and Guba (1985), are as follows:

1. Credibility involves having confidence in the findings. The concept of credibility raises two questions about research: a) are findings truthful in so far that they are believable? And b) are the findings representative of the construct under exploration?
2. Dependability focuses on the extent by which any findings from the research are consistent over time, or at least, different conditions. Thus, should the experiment be repeated using the same data collection methods, could one still achieve similar or the same themes?
3. Confirmability refers to the steps taken to minimise the influence of bias.
4. Transferability focuses on the transferability of the research to other contexts, based on the notion that qualitative research cannot be generalised.



I will now outline how I have attempted to meet the criteria of credible, dependable and confirmable research according to these four criteria.

Feature of Research	
WUSCT Procedure and Assessment	Credibility Dependability Confirmability
Triangulation	Credibility Dependability – could be dependable as observations occurred across different conditions. Confirmability
Interview relentlessly focused on practicality and observables	Confirmability Credibility
Only Wicked Problems Used in Data Collection	Credibility
Data Analysis Procedure	Credibility Dependability Confirmability
Being Blind to a Participant’s AED Stage	Confirmability
Note on Transferability	

*Table 8 Summary of How Lincoln and Guba's (2015) Evaluative Criteria Were Met Within the Research Design.*

### **3.9.2 Assessment of Ego Stage**

Assessing the AED of HT/Ps had to be credible. Without a credible assessment of AED, it would be difficult to associate any themes identified within the actions of leaders with the underlying developmental stage. Furthermore, it would thus undermine any claims that I made between the underlying theory and its manifestations in practice.

The main step I took in ensuring the credibility of assessment was to follow the guidance, self-training, and protocols set out by Hy and Loevinger (1996) in the WUSCT manual (section 3.6.1). The test and manual have been consistently demonstrated to be a highly valid and reliable measure of AED (Novy and Francis, 1992; Novy et al. 1994; Manners and Durkin, 2000; Pfaffenberger, 2011). I would argue that the following protocols ensured the credibility of the assessment:

- The provision of a training process. The self-training has been demonstrated to be an effective mechanism for developing assessment capability (Hy and Loevinger, 1996). Following this training and the pre-set examples helped ensure that the assessor could use the manual appropriately.

- Dual Scorers. The protocol demands that two individuals independently assess the stage of AED. These individuals then compare scores and discuss any disagreements. Dual scorers are an important part of the protocol. the manual is qualitative by nature (Appendix 2) and, consequently, responses could be interpreted differently. Ensuring two assessors agree with the results will, therefore, improve confidence, and therefore credibility in the assessment.
- Relevance to contemporary research. The WUSCT manual and procedure continue to be utilised in large scale studies within contemporary literature (Lanning et al., 2018) and is recognised by others as the best measure for this purpose (Pfaffenberger, 2011).

These protocols also ensured that the assessments were dependable and confirmable. There was an 0.88 agreement between myself and my fellow assessor. This agreement surpasses average inter-rater reliability achieved by larger-scale studies such as Manners, Durkin and Nesdale (2004) of 0.8. Given our strong agreement on how to apply the manual to each response, I could be more confident that the assessment of all the participant's AED stage was consistent. By relying on two individuals, and both individuals having to concur with the other, the scores can be said to have both been confirmed and upon as assessments of AED.

### ***3.9.3 Triangulation***

Triangulation is defined by as the use of multiple data sources, methods, analysts or theorists to corroborate findings and also *"attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint"* (Cohen and Manion, 1986, p. 254). It is a recognised strategy for enhancing the credibility of research (Salkind, 2010). In this section, I will describe my triangulation approach and how this assisted the creation of credible, dependable and confirmable results.

My triangulation approach is an original approach, in that there were two ways in which I triangulated emerging themes:

1. Triangulation through two types of critical incident:
  - a. A hypothetical critical incident.
  - b. A recalled critical incident.
2. Triangulation through individuals. Conducting both tasks with the HT/P and colleagues around the HT/P.

## Triangulating Through Types of Critical Incident

In my research design, participants needed to discuss two critical incidents – a recalled problem within the organisation, and a hypothetical critical incident. Both needed to be completed by the HT/P, the HT/P's line manager (Chair of Governors) and an individual that the HT/P line manages (Deputy or Assistant HT/P). I asked those working around the HT/P to answer in a way that described how they saw/perceived the HT/P's response to incident.

Independently, each task has its flaws that could undermine the credibility of the emergent themes. For example, recalling during an interview requires individuals to accurately recall specific details of an incident, which can be impacted by the interview technique and an individual's circumstances (Hope, Mullis and Gabbert, 2013). Also, individuals discard events that have happened since the incident and failing to do so might install artefacts into their recollections, affecting their current interpretation of the incident (Kvale, 2007). On the other hand, with the hypothetical critical incident, Collet and Child (2011) recognise that individuals must imagine themselves within a context and situation which might not be concretely relatable to their past experiences. Furthermore, they also recognise the need for participants to separate how they would ideally envision themselves acting, from how they would act in reality. Either set of flaws would limit the degree of confidence that the practices and approaches distilled from the data are representative of their actions/observations and not emerging because of the incident. This risk was heightened by the small sample in this study, where artefacts can quickly escalate into bigger themes.

Using a combination of hypothetical and recalled data increases the credibility as the strengths of the other task supplement the weaknesses of one task. For example, whilst responding to a recalled critical incident required to recall, responding to a hypothetical critical incident can risk being the imagined self. This risk can be counterbalanced and cross-checked by data that demonstrate real-life activities undertaken by the HT/P. By asking individuals to provide two different incidents, and then discounting themes that did not occur consistently across the two streams, it is more likely that the themes generated are a credible reflection of the HT/Ps day-to-day practice and not as an error emerging from the demands of the task.

Combining incidents can also increase the dependability of the data. Combining incidents is important for comprehending AED. If we are to say that these themes are a result of AED, there should be some consistency across different conditions. Consequently, by using different tasks, I increased the number of scenarios in which each theme was observed. This approach fits with how

Lincoln and Guba (1985) described how dependable results should be observed over different conditions and time points – increasing the number of tasks in which each theme is observed achieves both objectives.

### Triangulating Individuals

Although introducing different tasks is a mechanism of triangulation, relying on the self-perception of the HT/P alone is insufficient to build credible and dependable observations. Such an approach, on its own, would be open to the same critiques that apply specifically to self-report methodologies. For example, memory. Asking individuals to self-report their own experiences places significant demands on autobiographical memory (Jobe, 2003). The demand of the task makes this point particularly pertinent in wicked problems. As outlined in section 2.2.5, wicked problems contain multiple variables and are rich in organisational complexity. Thus, the precise details of the event are difficult to recall. Another problem with self-report is social desirability, which is a form of measurement bias which occurs when individuals seek to give answers that are more likely to be viewed favourably (Paulhus and Vazire, 2007). This bias can occur both in interviews and in survey-type tasks (Nederhof, 1985; Tourangeau, Rips and Rasinski, 2000). Consequently, unless the triangulation involves individuals from outside the HT/P themselves, a significant measurement bias remains. This bias is a threat to confirmability and dependability. This bias would undermine the confidence that patterns of behaviour are truly dependable. Furthermore, the exposure to bias risks confirmability. The risk of this bias, therefore, justifies the point that collecting data from other individuals could enhance the subsequent findings.

In deciding which individuals to involve around the HT/P, there were several factors to consider. Their position within the hierarchical chain could impact the range of behaviours and the very nature of the relationship they hold with the HT/P. For example, due to the difference in formal power between the individuals, HT/P could hold a different relationship to their direct reports compared to the relationship they hold with their line manager (Keltner, Gruenfeld and Anderson, 2003; Sturm and Antonakis, 2015). Furthermore, Smith and Fortunato (2008) recognise that a range of factors can impact the extent to which subordinate employees will provide honest feedback. Based on these two factors alone, it is evident that securing dependable responses from those around the HT/P might be a challenge.

I therefore decided to select two individuals that worked closely with each HT/P. One had to be an individual who reported directly to the HT/P (e.g., assistant or deputy HT/P). Also, I selected the

HT/Ps line manager (e.g., Chair of governors). Selecting individuals from different points of the organisational chain of command allows me to account for these different relationships in the themes that emerged.

This approach enhances research quality in several ways. As AED is a universal process, I would expect to see said practices consistently across a range of different incidents and time periods. Because I have collected data from multiple individuals outside of the HT/P, I can be more confident that any observations could be considered a regular feature of how the HT/P interacts within their context and not as a consequence of self-report error. Therefore, utilising two individuals increases the credibility and dependability. Finally, these steps improve confirmability. Any personal bias that any individuals might hold were controlled through selecting individuals from different positions within the hierarchy.

In this section, I have outlined how triangulating the themes using different individuals and tasks has increased the credibility, dependability and confirmability of my data. However, triangulation only goes so far and is dependent on the following:

- The incident itself is based on a suitable paradigm, i.e., wicked problems.
- A data collection procedure that can look for the common themes across the data sets.

I will now turn my attention to these two facets of my research design.

#### ***3.9.4 Ensuring that Critical Incidents Met the Criteria of a Wicked Problem***

I took steps to ensure that the event the HT/P (and other staff) selected a wicked problem. Appendix 4 outlined the guidance that was issued to participants a working week before the interview. Sending out guidance before the interview gave the participants time to select an incident that best met this criterion. We would discuss the incident before the interview to check for suitability. The direct and challenging nature of the interview protocol outlined in section 3.6.2, made it possible to challenge the interviewee to explain how they felt this met the criteria of a wicked problem.

The design process of the hypothetical critical incident (outlined in section 3.6.3) also took wicked problems into account. Throughout the initial design phase, HT/Ps were taught about wicked problems, given generic examples of wicked problems, and given explicit reminders of the criteria during the design phase of the workshop. In ranking and validating each wicked problem, I asked HT/Ps to rank them according to the tasks that met the wicked problem criteria. Finally, I placed

myself in the role of collating all the individual examples into a single hypothetical problem, acting as a safeguard for ensuring these wicked features were explicit.

These proactive steps enhanced research quality. Part of credibility is ensuring that the findings are representative of the construct under investigation (Lincoln and Guba, 1985). Given the task of the research was to establish the relevance of AED in shaping a HT/Ps practice, I could only consider findings credible if the incidents that the HT/Ps engages is sufficiently wicked. It is these conditions that are required for individuals to have to engage in sense-making and thus AED. Therefore, by taking these steps to ensure that the problems reflected on by leaders were wicked, I could make stronger claims that the responses of the HT/P were because of AED. Without building on the features of a wicked problem, the patterns of practice which emerged could not be credibly linked to an individual's stage of AED.

### ***3.9.5 Data Analysis Procedure***

The data analysis procedure was a critical aspect of the methodology that ensured research quality. Dependability is enhanced because of this process because, as indicated in section 3.8, I only recognise themes as legitimate when multiple observations from across different individuals and types of tasks were made. Lincoln and Guba's (1985) referred to this as persistent observation, whereby a specific phenomenon is studied intensively. Consequently, HT/Ps response to wicked problem in each stage group can be said to be more consistent across the practice within the group, and thus more dependable. Furthermore, this data analysis procedure enhanced credibility. If AED is to be said to be a driving influence in the HT/Ps response, it must be observed across multiple scenarios. As outlined, the data analysis procedure facilitated these observations. Finally, because of the intensity of observing these themes across as many as 64 individual data points, there is greater confidence that the themes emerged from the data and not individual bias. Hence, confirmability can be said to have been enhanced. Thus, by electing for a data analysis process underpinned by persistent observation, I have taken steps to ensure that themes from this research are credible, dependable, and confirmable.

### ***3.9.6 Controlling for AED Stage***

I took multiple steps to ensure that I was unaware of an individual's stage of AED until I had analysed the interview data. These steps included: selecting participants at random from a pool of individuals; only assessing an individual's stage of AED after their data had undergone second cycle coding; and maintaining a reflective journal to monitor any subsequent assumptions I had previously made.

Through these steps, I can confidently state that, at no time, did I establish relevant themes from the data knowing an individual's stage of AED. Furthermore, maintaining a diary ensure that I could self-check against any emerging assumptions about individual participants and the findings as they emerged through the analysis.

These were vital steps that improved the confirmability of my research by limiting the potential for bias. Without knowing the stage of AED, I could establish the relevant and common themes within HT/P's practices whilst controlling any observations within specific stages of AED I might have assumed following the findings from the literature review. By having concrete strategies to expose myself to their stage of AED only until a late stage of data analysis, and using a diary method to monitor my assumptions, I can state that I attempted to limit the impact of any potential bias upon my findings, thus enhancing confirmability.

### *3.9.7 Note on Transferability*

The sample in this study was small, which inherently limited the transferability of this study beyond a robust exploration of the potential of AED. Small sample sizes limit the extent of generalisation as it makes it harder to rule out other factors that can influence how individuals respond to wicked problems. I ensured that the aim of this study was only as an exploration of the potential for AED in understanding an HT/P's practice. Furthermore, as few studies exist within this domain, exploring potential methods for studying AED within practice was another key aim.

To demonstrate the potential of AED and explore a potential method for understanding HT/P practice, I ensured that the themes were transferable between participants within the same AED group. I achieved this by taking three steps:

1. These themes had occurred consistently across participants in each stage group. In section 3.8.2, I outlined how each theme emerged from different tasks and was validated by individuals outside of the HT/P. I outlined how the data analysis protocol would only allow themes to emerge should they appear across multiple cases. Consequently, I could be confident the themes demonstrating how AED shaped an HT/P's practice was consistent across a range of situations and individuals, granting me the confidence to suggest that these themes might potentially occur across a wider range of individuals within each stage group.

2. I ensured that these themes were not a consequence of bias or local factors. The same method of triangulation (incidents and individuals) allowed me to reduce the risk of bias. First, as the themes had to be observed by the deputy HT/P and the Chair of governors, I could rule out the weaknesses related to self-report outlined in section 3.9.3. In the same section, I outlined how using different tasks rules out errors in recall, idealisation, and other factors. Within each AED stage, there was a broad range of different demographic variables, such as gender, age, school type (primary and secondary). Yet, within this breadth, what did unite each group was their AED score. I could, therefore, be more confident that these themes were not due to local factors but were common across individuals within each AED group.
3. I made sure that the themes within each case study align with AED theory and that I could rule out any other influences on the themes generated. The final themes were analysed considering the individuals' underlying stage of AED to see if they were representative of Loevinger's AED theory (section 5.2.1).

However, given the sample size, I have been cautious in the links made between the themes emerging from the practice of HT/Ps and AED theory. I have exercised caution through the following steps:

1. I have accepted an epistemological constructivist position. As I have described in section 3.3.1, my attempt to explore how AED shapes a HT/P's practice model of an ontological reality. Such models are fallible and should be open to further critique and development.
2. Throughout the study, I have been exposing my work to extensive peer review. Throughout the project, I have worked with fellow peers within the field (notably in presenting my work at the following conferences: European Society for Research in Adult Development, 2016 (Gilbride and James, 2016) and 2018 (Gilbride, James and Carr, 2018); British Educational Leadership, Management and Administration Society, 2016 (Carr, Gilbride and James, 2016) and 2018 (Gilbride and James, 2018); and American Educational Research Association, 2017 (Carr, Gilbride and James, 2017). The purpose of these conferences was to seek informal peer review and critical feedback throughout the design and analysis of this research.
3. Furthermore, a substantial proportion of these results have been published via peer review (Gilbride, James and Carr, 2020). Based on this feedback, I feel more confident in the links made between AED and how HT/Ps responded to these wicked problems.



4. I acknowledge that further testing of these themes on a larger scale would be an important next step (section 5.3).

### *3.9.8 Summary*

I have taken steps to ensure credibility throughout my research. I have ensured that we can have confidence in the assessment of the HT/P's stage of AED through following well-established protocols outlined by the authors of the WUSCT. I have ensured that the responses of the HT/P could be associated with AED by ensuring that the focus was on the sort of wicked problems that are particularly relevant for sense-making, and thus AED. Finally, the use of persistent observation within the data analysis process means there is greater assurance that common themes describing the practice of HT/Ps within a given stage of AED have emerged consistently and regularly across a wide range of individuals and data sources.

I have taken steps for dependability on the findings. Each HT/P's WUSCT was assessed by two individuals and achieved a higher agreement than is typically expected in the use of the test. HT/P's were observed across different examples and from different sources. The data analysis procedure ensured that themes had to be observed consistently across the different sources and units. I can, therefore, be more confident that the assessment of the HT/Ps' stage of AED was concordant across different individuals, and the observed themes occur consistently in the HT/P's response to organisational complexity and wicked problems.

I took steps to eliminate bias throughout the research. Following the WUSCT protocols, including the use of a second individual from outside the research to assess AED, meant AED was determined using the guidance from the WUSCT manual and not any first impressions that might have formed during data analysis. I did not assess AED stage until the data from the interviews were processed, which meant that themes emerged from data alone and not from assumptions that could be generated from knowing an individual's stage of AED. I systematically worked through the data, building themes from multiple observations across different individuals and types of task. Therefore, throughout each stage of the research, steps were taken to ensure themes emerged from the data itself and could be confirmable.

I have attempted to take a balanced position for transferability. I have recognised the relatively small scale of this research and managed the claims of this research accordingly. At the same time, I recognise that my methodology has a high degree of intensity - each theme has undergone

stringent, persistent observation and thorough testing. This intensity provides a strong basis to test claims that AED is a relevant line of enquiry for understanding an HT/Ps practice.

### 3.10 Ethics

Ethics is defined by Wiles (2013) as “*moral behaviour in research contexts....*”, which they go on to define moral behaviour as “*concerned with intentions and actions which are good*” (p. 4).

Conceptually, I will first consider how linking a deeply personal psychological construct, such as AED, to their professional role could present an ethical challenge. I will explain how, due to the developmental nature of AED, this construct might provide a more ethical choice than the current use of psychometrics within organisations. In addition, I will outline the challenges presented by feeding back such sensitive information and how I managed these challenges.

#### 3.10.1 Linking Maturity to Effectiveness

It is important to question the consequences of establishing links between professional performance and an individual’s personality. AED represents a deeply personal construct that this is more than our professional and personal preferences. The ego is considered the very core of how we have come to understand our world (Loevinger, 1976; Kegan, 1982). Indeed, within the literature, maturity is often the adjective utilised in the discussion of development through each stage of AED (Loevinger, 1976; Vaillant and McCullough, 1987; Cohn and Westenberg, 2004). In this research, I am making an explicit link between psychological maturity and how individuals conduct themselves in a key part of their role. I am aware that making a link to how an individual conducts their role to an inherent part of their personality could have negative implications for how individuals perceive themselves beyond their professional role.

I believe there are several factors which mitigate and justify establishing such a link. The use of personality measurement and psychometrics is not new to human resources. The Myers-Briggs Type Indicator (Michael, 2003) is a psychometric model which looks to explore personality and is a staple of leadership and team development (Coe, 1992). Lord (2007) describes the importance of psychometrics (the application of psychological measurement) in both the recruitment and development of staff. The Five-Factor personality model has also been applied to a range of occupational factors, including performance (Lee, Ashton and de Vries, 2005; Oh and Berry, 2009). Therefore, establishing a link between personality constructs and individual performance is already commonplace within human resources and people development.

Indeed, one could argue that the developmental underpinning of the WUSCT makes my approach far more ethical than if I was to use other personality-based psychometric assessments. The models mentioned above (Myers-Briggs type indicator and the Five-factor model of personality) are diagnostic – people generally do not change throughout their life span, and such constructs are considered relatively static (Costa and McCrae, 1993). Thus, while such data provides insight into who they are and how to work with others who are different, the results do not tell them where they can go next in their personal growth. On the other hand, AED can grow and develop over time. Therefore, in this study, establishing links between AED and a headteachers' practice gives a pathway for further development. Thus, any perceived advantages associated with a particular stage are achievable to anyone. Furthermore, the results from the WUSCT, rather than providing a fixed diagnosis on an individual's current and potential capacity, can provide information that could facilitate further development. Given the potential for development that this information could facilitate, I, therefore, conclude that the developmental characteristics of the WUSCT can be considered a more conscientious choice compared to traditional psychometrics.

### *3.10.2 Consent and Transparency*

All individuals were given a briefing document before accepting to take part (Appendix 4). This document outlined:

- What the study involved.
- The data that was collected.
- The steps that were taken to ensure the safety and wellbeing of participants.
- The risks of taking part.
- Data retention and security.
- How to opt-out of the study.
- Mechanisms for feeding back results and protecting the participant.

I wrote these guidelines utilising the BERA documentation on consent and transparency (BERA, 2018).

### *3.10.3 WUSCT Questionnaire*

The data from the WUSCT contains sensitive information for three reasons. Firstly, this is a personality assessment. Personality assessments are personal, private data. Secondly, the individual responses to some of the questions could be considered personal and sensitive:

- Two questions about their perspective on sex.
- Indicators about their professional work/values (i.e., “Education is...”).
- The relationship between the participant and their father and mother.

Finally, the global nature of the questionnaire exposes the participants’ perspectives on a range of different issues. Such data could compromise the participants professionally or prove personally embarrassing should the data not be controlled.

In mediating the impact of this personal data, I took the following steps:

- Individuals were warned about the nature of the WUSCT and could see a copy of the test before confirming their participation in the study. I offered the opportunity to withdraw at any time.
- Individuals could have refused to answer any sentence stem. I ensured that participants had the opportunity to explain the reasons behind their decision. Owing to the flexibility of the WUSCT manual, these explanations could be attributed to a level of AED. Thus, individuals could have submitted data they felt comfortable with and still participate within the study.
- BPS guidance states the need to protect client confidentiality and both myself and my colleague scoring the assessments agreed to maintain this as part of our membership status to the BPS (BPS, 2018).

After the assessment was complete, I destroyed any digital and paper copies of the assessments received from participants.

Before I returned the outcome of the assessment, I requested that HT/Ps provided an appropriate private email account. Through using a private account, I prevented their WUSCT results from being accessed by other members of staff (e.g., personal assistants or other members of staff through a shared inbox).

### ***3.10.4 Interview Protocol***

The triangulated interview protocol also carried a risk for the participants. Interviewing individuals about the behaviours of a colleague could have inadvertently released unsavoury information and opinions that had the potential to damage the relationship they held with those in their organisation. I could have accidentally communicated overlap between incidents cited by different participants. Furthermore, the reporting of the findings could inadvertently release information

about what was discussed. Therefore, the use of the interview had the potential to impact on those within the HT/Ps organisation.

To protect against these factors, I took the following precautions:

- Taking specific steps in reporting the results of the thesis. I removed all the names of any school or individuals involved. All identifying features of incidents that could inadvertently expose the source of the incident and the individuals involved were deleted.
- I ensured that the protocol focused on collecting the necessary data. I only collected data that was required to understand the HT/Ps practice and colleagues' perceptions of the HT/P.
- I depersonalised the feedback provided to the HT/P. Each HT/P received feedback that was generic to HT/P across that developmental group (Appendix 6), limiting the potential for HT/P to identify themselves and colleagues within the reporting of specific incidents.

Debriefing was another important feature in reducing my impact on the organisation. I was aware that, during the process of the interview, participants could have re-lived and re-established issues arising from the recalled incidents. The recalling of prior incidents could have had a subsequent impact on their relationships with colleagues. In ensuring that my research left a minimal negative impact on the organisation, I managed this risk through de-briefing. This process involved a separate, non-recorded, conversation. In this conversation, using my experience as a counsellor and psychologist, I supported individuals to resolve any residual thoughts and feelings.

### ***3.10.5 Results***

As highlighted in section 2.1.2, the results of the WUSCT and the themes that have emerged from each developmental group have great potential for facilitating their own development. HT/Ps deserve the right to important information that could promote professional and personal growth.

However, the results also have room to impact upon participant well-being and negatively impact on self-perception. HT/Ps might receive a stage which they perceive as below their level of operation, or if they were uncomfortable with the overall description/way of working identified in each stage. Thus, without actively managing the process of dissemination, something that has the potential to be developmental could inadvertently undermine an individual's self-perception and self-esteem.

In minimising the negative impact, I offered all participants three sessions (one hour in length) of coaching to describe and explain their outcome from the WUSCT assessment. These sessions

allowed me to perform a debrief and to screen for any negative impact that emerged from the result. Furthermore, I could use the remaining time to ensure individuals understood their result and to help them to see what their stage of AED meant for themselves and their practice. My own professional experience informed the design of these sessions as a coach/mentor, coach trainer and trained counsellor.

### ***3.10.6 Data Security***

I ensured that all data (primary and created) was held according to the Data Protection Act (2018) and General Data Protection Regulation (2016). No data was kept or maintained on personal devices. All data was kept and accessed on a secure university server. After processing, I removed all primary data from the server. All individuals consented to the use of their data for the project, wider dissemination and in providing general feedback to other individuals.

### **3.11 Summary**

In this chapter, I have outlined the steps I have taken to ensure a robust and ethical methodology. I have justified how the position of critical realism has informed my research questions as well as decisions within the research design, data collection methods and analysis. The multiple case study approach has been justified as an appropriate choice for the research questions and objectives. I described how I sampled 20 HT/Ps through a purposive approach. In collecting the data for this project, I explained my choice of the WUSCT as the strongest possible approach for assessing an HT/Ps stage of AED. I described how I used different examples across three individuals within each setting to determine how HT/Ps comprehend and interact with complexity and wicked problems within their organisations. I used my data analysis section to explain how I established the common themes across HT/Ps within the same stage of AED. In the section 3.9, I discussed how I used a range of techniques to ensure that my data was transferable, credible, confirmable and dependable. Finally, I outlined the extensive steps taken to ensure that ethical protocols were followed.

## Chapter 4 Results

### 4.1 Introduction

In this chapter, I will outline the results of the primary study. This chapter consists of four sections; in the first section, I will report on how many individuals I sourced in each AED stage and the necessary demographic information on the sample. This data will demonstrate the heterogeneity of the sample across the three case studies. The remaining three sections will be separate case studies for individuals within the three main ego development groups – Self Aware, Conscientious and Individualist. In the final section, I will summarise the central themes which have emerged from across the case studies.

Each case study has five sections, with each section outlining the different aspects of how the HT/P within that stage responded within the interviews. These sections are as follows:

- **Responding to Incidents:** This section explores how the HT/P sought to understand the incident, how they processed the incident and how they subsequently acted.
- **The Role of Others:** This section focuses on how the HT/P interacted with those around them. It will include the formal roles that the HT/P assigned, the role that others played in comprehending the situation and the extent to which HT/P involved those around them in the decision-making process.
- **The Handling of Feelings:** The involvement and role of feelings in comprehending and responding to events.
- **How Others Experienced Them:** In this section, I outline how those around the HT/P described working with their HT/P.
- **Awareness of and Sensitivity to Complexity:** Within this section, I will examine the degree to which HT/P handle the complexity of a given task/situation. This theme uses both primary observations from the data and reflections that have emerged from within the previous sections.

In section 5.2, I will summarise the themes that have emerged from across the case studies.

## 4.2 Sample

The sample of 20 HT/Ps was selected from an initial pool of 40 HT/Ps. The details of their recruitment and the sampling strategy can be found in section 3.5. All HT/Ps were recruited from a combination of Primary and Secondary schools within the English state sector. Of these HT/Ps:

- 5 HT/Ps were assessed to be within the Self-Aware stage of AED.
- 8 HT/Ps were assessed to be within the Conscientious stage of AED.
- 7 HT/Ps were assessed to be within the Individualist stage of AED.

The demographic details of each HT/P are presented in Table 5.

<b>HT/P</b>	<b>Gender</b>	<b>Approximate age (Years)</b>	<b>Type of school (Primary or Secondary)</b>	<b>Stage</b>
<b>A</b>	Female	30-40	Primary	Self-Aware
<b>B</b>	Female	40-50	Primary	Self-Aware
<b>C</b>	Female	40-50	Primary	Self-Aware
<b>D</b>	Male	50-60	Secondary	Self-Aware
<b>E</b>	Male	40-50	Secondary	Self-Aware
<b>F</b>	Female	30-40	Primary	Conscientious
<b>G</b>	Male	30-40	Primary	Conscientious
<b>H</b>	Female	40-50	Secondary	Conscientious
<b>I</b>	Female	50-60	Secondary	Conscientious
<b>J</b>	Male	50-60	Primary	Conscientious



<b>K</b>	Female	30-40	Secondary	Conscientious
<b>L</b>	Female	40-50	Secondary	Conscientious
<b>M</b>	Male	40-50	Primary	Conscientious
<b>N</b>	Female	50-60	Primary	Individualist
<b>O</b>	Male	30-40	Primary	Individualist
<b>P</b>	Female	40-50	Secondary	Individualist
<b>Q</b>	Male	40-50	Primary	Individualist
<b>R</b>	Male	40-50	Primary	Individualist
<b>S</b>	Male	40-50	Secondary	Individualist
<b>T</b>	Female	40-50	Secondary	Individualist

*Table 9 Demographic Data of Participants*

I can be confident that the AED stage was the primary descriptor within each AED group and no other demographic variable dominates any specific AED category. Within each AED stage, there is an appropriate mix of different ages, gender, location and school type. Although there are likely differences in other aspects of personality and psychological functioning, AED can be considered independent of many of these constructs (section 2.1.2). The only demographic category that individuals hold in common is their AED stage. I, therefore, have confidence that, within each developmental group, the AED category could explain the common themes that emerged from analysis of the data.

There was a variety of incidents that were mentioned by the HT/Ps. Most of these incidents revolved around staff discipline, managing whole school behaviour and responding to specific children that have a range of individual needs. There did not appear to be a specific cluster of types of incidents within one group.

## 4.3 Headteacher/Principals within the Self-Aware Stage of Adult Ego Development

### 4.3.1 Introduction

HT/Ps within the Self-Aware stage have an efficient, focused, action-orientated approach to comprehending and responding to wicked problems:

- The HT/Ps within this stage are focused. They prioritise the use of hard, observable data that emerges from within the incident itself.
- The process is efficient. This data would then be used in a private thinking process to determine what is happening within the situation and what they need to do next. Those around the HT/P will be called upon to provide guidance and support the HT/Ps understanding and plan of action.
- The Self-Aware HT/P prioritised action. They focus on describing the action taken. Those around the HT/P would describe their HT/P as a problem solver, known for their quick responses to the situation.

### 4.3.2 Comprehending and Responding to Incidents

Three core themes summarise the response of HT/P within the Self-Aware stage:

- HT/Ps would seek to collect hard evidence on the situation.
- HT/Ps would conduct a private sense-making process.
- HT/Ps would seek to establish a quick and timely action plan.

#### Collect Hard Evidence on the Situation

In obtaining an understanding of the incident, HT/Ps within the Self-Aware stage, prioritise 'hard' data. I define hard data as data that is either factual accounts or measurable performance data. Hard data is different to 'soft' data, which I describe as the interpretations and judgements of others.

Compared to other stages, HT/P within the Self-Aware stage made greater reference to 'hard' data. Other forms of information - such as interpretation, judgement and reasons, were not as common.

This data included:

- Interviews with those involved.
- Observations in the form of a diary, action log or formal teaching observations.

- Data from school records – such as the behavioural incident log.

An example of this was how B1 responded to informal inspection. B1 was informed that low level behaviour needed to be improved. B1 used a recording system of incidents, across school and home, to obtain insights into specific individuals' behaviour. C1 also referred to a behaviour management incident and made use of a behaviour management diary to understand the rise in incidents across the school. A1, in their response to the hypothetical critical incident, outlined they would seek extra information on the students from the teacher – this included *“engagement in class if they had a positive behaviour points system”*. A2 and A3 corroborated this approach, anticipating that they would speak to the teacher first for extra information.

The HT/P within the Self-Aware stage would seek out the data in an interrogative fashion. E1 was brought into a substantive student behavioural incident that was considered complex due to the sensitive nature of the incident and the lack of clarity over who started the incident. E1 started by asking the two children involved for their accounts of the incident, *“I asked that what they saw each person do, who acted first and who else was involved”* and would use the time to ask questions about what they had happened. In describing the response to an earlier behavioural incident (it could not be confirmed if this were the same incident), E2 recalled: *“E1 would ask me questions; what I saw, who I spoke to...”* E3 described how E1 would prepare for conversations with her staff and within governors' meetings. E3 described E1 as *“someone who knows their facts”*. When setting the school priorities for the academic year, E3 described how E1 would have a priority for hard data:

*[they] likes their school data! [They] know it inside out, and they prioritise ensuring that the governors know the data too.*

These examples illustrate the approach of HT/Ps in the Self-Aware stage to information gathering; they seek, question and focus on the 'hard' data to help understand an incident.

### Conduct a Private Sense-Making Process

HT/Ps within the Self-Aware stage sought to understand the situation through a private, 'self-sense-making' process. HT/Ps did not seek out others to discuss their understanding of the situation, nor did they seek to develop the understanding of others. Furthermore, HT/Ps were reported by others to not share the rationale behind their ideas and individuals across the samples made explicit references to how the HT/P will make decisions on their own.

Within the structure of the responses, it was clear that the HT/P's description of the thinking process revolved around their interpretation, judgements and understanding of the situation. HT/Ps in this stage would describe receiving the information and then their decision process. HT/P D1 described how they responded to an ongoing staff discipline issue, which reached a head when new information came to light:

*I felt like that, off the back of what had happened and the feedback the new teacher had received, that I was at the point where I needed to move the other teacher out. I needed to call HR to get my policies right and then start to collect the evidence that I needed, which included the performance management minutes...*

In this example, the description is an internal monologue – D1 describes how they responded and interpreted the information without much reference to the interpretations or analysis of others. This process highlights that, although there was a due process of thought before action, this was a private, internal process.

Those around HT/Ps at this stage described how they would not typically be involved in the decision-making process. For example, E3 stated, “[the HT/P] *would then tell me what action I need to take with the governing body.*” One quote from B2 summed up the experiences of those around HT/Ps in the Self-Aware stage:

*they do not share what they are thinking per se ...there isn't much thinking out loud...they tell me what we need to do to get it right.*

Therefore, while those around the HT/P are involved in providing information and supporting the response, the reasoning is built upon the internal processing of the HT/P.

I saw no evidence of HT/Ps requesting anything beyond the data or observations immediately generated from the incident. These three observations from the data support the notion that HT/Ps within the Self-Aware stage elect to develop an understanding of the situation privately and internally. Instead, the HT/Ps requested this hard data to facilitate their sense-making process and the resulting action plan that needed to come next.

In addition to understanding the situation through 'self-sense-making', HT/Ps within would decide how to act through their judgement. Examples illuminate how the HT/P would reach their judgement on the situation and use this as a basis for action. For example, on reaching an

understanding of an incident involving a disagreement between a teacher and a teaching assistant in regard to the spilt of working hours, A1 reflected *“When I heard what had happened, I knew what we needed to do.”*A2 reflected on the individualised nature of the decision-making process. A2 described how, following comment from third parties, that there was a need to replace some school equipment despite a challenging budget. A2 observed that the discussion was brief, and decision made swiftly:

*[A1] makes a decision, they don't talk this through really. They make a decision, and we get on with what needs doing.*

A3 also captured this approach in how they experienced A1. *“A1 is very decisive”*. Across these three individuals, the decision making remains with the HT/P, and their understanding of the situation remains internal to themselves.

The group of HT/Ps within the Self-Aware stage would go on to outline what they thought was the focus of the situation and the remedy that needed to be applied. D2 outlined how, in the hypothetical critical incident, that they would expect for the HT/P to *“describe what we are going to do next”*. D3 also identified that the HT/P would be the central point of decision making.

The HT/Ps perception of how to act remained central even when the HT/P had received suggestions. For example, C2 described how C1:

*Would look through ideas and [they] would share what [they] thought was the most realistic and what wouldn't work based on her experience of other schools.*

They would go on to formulate the idea and how they would need to do it. In this example, the HT/P's perception is still central to the decision to act. Those around the HT/P described how they would inform them of their choice and delegate swiftly.

In summary, HT/Ps within the Self-Aware stage engage in self-sense-making when they are reaching an understanding and in deciding how to act. While the HT/P would bring in others to supplement this process with hard data, and actions would be delegated to others, the process of reaching a decision and an action plan is private to that of the HT/Ps.

## Establish a Quick and Timely Action Plan

HT/Ps within the Self-Aware stage respond quickly to situations. The need to respond immediately emerged 13 times within the five HT/Ps, making this one of the most populated themes within those in the Self-Aware stage. Other themes suggested that HT/Ps within this stage sought a quick process (section 4.3.2). HT/Ps in the Self-Aware stage focused on the task, establishing the immediate concerns of those around them and were more likely to decide on their own. All these themes indirectly link to a response focused on expediency; the process is focused on what is immediately available that describes the situations, remains focused on the task and deciding on their own is likely to be quicker than consulting with a wider group of individuals.

In addition to the explicit codes that directly linked to expediency, there are far fewer themes that link to a long process of decision making. Actions associated with involving others (private counsel, dialogic conversation, co-construction) were far less common. Also, the process of reflection was not a specific priority for HT/Ps in this stage. Therefore, while there was evidence for explicit reference to a speedy process, there was also very little evidence of processes that could slow that process up. Thus, not only is this theme clear in how the HT/Ps acted but also through how there was less recognition of other, more elongated processes.

The expression of this theme within the data varied between HT/Ps. Some HT/Ps made explicit reference to feeling the need to respond quickly. For example, A1 stated the need for speed within their response to the situation. In managing the disagreement between the two members of staff, they elected to resolve the disagreement before the end of the working day: *"I did not wait, I just knew what to do, and I went out to sort this."* This example is a more extreme instance of how HT/Ps at this stage would look to sort a situation out relatively quickly following the emergence of the issue. In other examples, the HT/Ps made more implicit reference to speed. For example, C1 in responding to a hypothetical critical incident, stated the need to: *"establish worries of the parent."* C2 corroborated this quote, who described *"in staff survey, behaviour in the children was not outstanding – that it was only good...[they] jumped on it."* The words of 'immediately' and 'jump' are suggestive of a HT/P that seeks to act in a quick, decisive manner.

To summarise this section; HT/Ps within the Self-Aware stage would, upon receiving the information, seek to respond quickly to incidents. Time spent on processing and to make sense of the incident is not as much of a priority as seeking to act upon what they understand the situation to be. Those

around the HT/P collaborated the perspective of them prioritising action in a quick and timely manner.

## Summary

HT/Ps within the Self-Aware stage sought to make sense of the situation in a private, timely manner. In achieving an understanding, the HT/P will prioritise the use of hard data obtained from within the incident. They use this data, provided by others, to sense-make within themselves. They would then seek to resolve the incident in a timely fashion.

### *4.3.3 The Role of Others in the Incident*

In this section, I will outline how HT/Ps within the Self-Aware stage used those around them to facilitate their action plan in both the understanding and responding to the incident. I will demonstrate this through the following two themes:

- Provide Information.
- Venting.

#### Provide Information

The HT/P used those around them to perform actions on the HT/Ps behalf. Most of the actions coded within the data that involved others were predominately around seeking information.

HT/Ps in the Self-Aware stage showed a preference for utilising others to collect the hard evidence on the specific incident. Upon discovering the incident, those around the HT/P would be instructed to obtain immediate, observable data on the incident. For example, D2 recalled how they were requested to seek information on a member of staff following a significant behavioural incident involving one of their pupils: *“the [HT/P] asked me to approach the member of staff involved to interview the member of staff involved”*. Other examples included how C2 was either collecting or coordinating the collection of data in the form of a behaviour management diary. C1 also sought the provision of information from C3 in the form policies and statutory guidance within the hypothetical critical incident. These examples highlight how key those around the HT/P is to provide key information from the incident.

In the selection and delegation of tasks, HT/Ps within the Self-Aware stage worked within the hierarchy of the organisation to distribute tasks. Delegation, according to hierarchy, was coded 13 times. HT/Ps sought senior individuals and provided direct instructions to those immediately below

and, if relevant, informed those directly above them. For example, when deciding what to do in handling child X, B1 stated:

*I brought my deputy HT/P out of their lesson, and I explained the situation. I said that...I need[ed] them to approach the teacher to ask what had been happening.*

In the hypothetical critical incident, B2 described how they would expect the HT/P to hand them a task. In this case, the individual would discuss the incident with the teachers involved. The theme of hierarchy became clear in how B3 highlighted in both the hypothetical critical incident and in progress relating to school behaviour, that they would expect B1 to inform them of the incident. These examples recognised that the HT/P would not necessarily delegate to the Chair of the Governing Body but would pass on necessary information akin to a line manager. In summary, the HT/P followed a classic chain of command within hierarchy - delegation to those below, to inform those above.

In summary, HT/Ps in the Self-Aware stage focused on how they could use those around them to understand or enact the response to the situation. The nature of the interactions was transactional and in cooperation.

## Venting

The second sub-theme appeared to be the role of others in providing a minimally responsive space for the HT/Ps to 'vent' their initial emotive response to the incident. This sub-theme emerged from questions focussed on how those around them experienced the HT/Ps.

HT/Ps would express their feelings. There was a variety of feelings expressed - from anger to sadness, from happiness to concern. However, participants made several references to an unexpected expression of feelings. The feelings expressed varied. There was the occasional positive reference. A2 described how their HT/Ps would often "*get excited and bouncy*" when there was positive news in relation to a change they had instigated, or if a child was found to be making progress in the school. A substantive number of these were in the annoyance of the situation. For example, D2, upon relaying the incident to their HT/Ps, recalled: "*D1 growled... [they] told me [they] was pissed off because that Y was still not doing [their] f\*\*ing job.*" These expressions of feeling were not all in annoyance. In another example, this time from E3, the HT/P was expressing that they were upset from the incident:



*E1 was upset, I felt like she wanted to cry and she told me she was upset and she then told about why E1 had found this so upsetting.*

Thus, it would appear that those around the HT/P believed they played an important role in supporting the HT/P to manage their feelings in response to the incident.

## Summary

HT/Ps make use of those around them to provide information and to act on their behalf. They would usually follow the hierarchical chain in delegating the tasks for each incident. Also, those around the HT/P provided a space for HT/Ps to manage their emotive response through 'venting'.

### *4.3.4 Comprehending and Interacting with Feelings*

The handling of feelings was not a predominant theme for HT/P within the Self-Aware stage. Responses contained few references to the handling of feelings within the incident itself- whether these were the feelings that could be generated by others or to the relational elements of the task. It is, therefore, rational to conclude that HT/Ps within the Self-Aware stage did not place a priority on attending to the feelings of others within an incident.

I must be clear that not placing priority on attending to feelings expressed by others is different from stating that HT/Ps within the Self-Aware stage are not capable of attending to, or fail to recognise, feelings. For the latter to be the case, I would expect/require a direct rejection of the questions relating to feelings within the incident. However, as discussed in section 4.3.4, HT/Ps within the Self-Aware stage could recognise the feelings that emerged from the immediate incidents from both themselves and, albeit less frequently, of others. Thus, a fairer and more accurate conclusion is that the HT/Ps within the Self-Aware stage did not prioritise feelings in their understanding or response to the problem.

### *4.3.5 How Others Experienced the Headteacher/Principal*

This section will briefly outline how other individuals described their HT/Ps as action-oriented leaders. The themes have both directly emerged from the data and how the themes described above come to support this view.

Descriptions and passing commentary on the HT/P made by those interviewed within the project alluded to HT/P as an action-orientated individual. For example, deputy HT/P A2 described entering

their HT/Ps' office: *"you know you are going to go into that office, and something will be done about it...it's great!"*. In this example, A2 implies that the HT/P will act before leaving the office – that there will be a tangible difference to the situation by the time they leave. A3 also noted, in responding to an incident between two members of staff, that their HT/P *"doesn't dilly-dally; they observe a problem and look to put it right"*. B1 wanted their behaviour diaries back within a week so that they could *"get the problem nipped in the bud"*. This was corroborated by B3., who described, in responding to concern over behaviour, that *"they don't hang around"* and B2 in how they described that the focus of their interaction would be what needs to be done (see section 4.3.5). D2 also observed *"I don't know how they do so much"* and D3 *"[D1] is exceptionally driven – they hit the ground running when they arrived and hasn't stopped since"*. The image from these examples is that those around the HT/P experience them as individuals who seek to act and act quickly to resolve situations.

Themes relating to how HT/Ps within the Self-Aware stage handle incidents are consistent with the description outlined by those around them. As described in section 4.3.2, HT/Ps within the Self-Aware stage sought a rapid resolution and focus upon how they responded opposed to how they processed or thought through the incident. These themes are consistent with an impression that HT/P within this stage as action orientated.

In summary, the HT/P within the Self-Aware stage are action-oriented individuals that will 'get the job done' This statement corresponds to both how the HT/P has handled complex incidents outlined in section 4.3.2 and the description of these HT/Ps by those around them.

#### ***4.3.6 Comprehending Complexity***

In this section, I will outline the degree to which HT/Ps within the Self-Aware stage perceived and worked with the complexity of the situation. The themes within this section have arisen from two sources:

- 1) Insights of complexity directly sourced from the data.
- 2) Implications of the themes already described in previous sections.

Five core themes emerged from how HT/Ps within the Self-Aware stage responded to these incidents:

- The HT/P focused remained within the immediate situation.

- Imposing simplicity.
- Causal linearity.
- Following hierarchy.
- Looked to apply the rules of any policy.

### The HT/Ps' Focus Remains Within the Immediate Situation

The Self-Aware HT/P would typically focus their thinking on what had happened within the timeframe of the incident. For example, in responding to a parent complaint, A1 expressed the need to outline the situation itself: *"I needed to understand what happened in this situation"*. A1 would go on to outline a series of tasks focused on obtaining information, interviewing staff member involved, the student and then the parent. Those around the HT/P also experienced the predominant focus on the incident itself. In D1, their response to the hypothetical critical incident task suggested that the HT/P would respond to the situation without trying to understand what happened before or after the incident.

This theme corresponds with other observations. In section 4.3.2, I outlined how HT/Ps within this stage will establish an understanding and act quickly to respond to the situation. I outlined how those around the HT/P remained focused on action. This focus on action is an example of how the HT/P focuses on the task presented to them.

### Imposing Simplicity

Seeking simplicity within the incident is a form of managing the complexity of an incident. Asserting or imposing simplicity reduces the number of variables under consideration. I will now outline the two themes that described how HT/Ps sought to impose simplicity within the situation – the nature of the response to the incident and the HT/Ps' processes of reaching a judgement within the situation.

*The speed of response.* The speed of response is a mechanism for maintaining the simplicity of the situation. As highlighted in section 4.3.2, HT/Ps within the Self-Aware stage responded quickly to situations. By prioritising a quick response, there is no time for other reasons or contextual factors to emerge – the situation becomes closed.

*Reaching a judgement.* The emphasis on individual decision making or 'self-sense-making' was evident in section 4.3.2, where the HT/P maintained a private thinking process focussed on an internal monologue. HT/Ps understood the situation and planned how to act on their own.

Both sub-themes relate to a sense-making process that attempts to maintain predictability within the situation. The focus on hard data, a private 'self-sense-making' process and a need to resolve the incident quickly, limit the number of variables and interpretations that can emerge from the situation. Consequently, the situation becomes simpler. Thus, this approach to tasks ensures the task and subsequent action plan remains conceptually simple.

### Causal Linearity

HT/P worked through their situation in a linear fashion. The structure of the responses within section 4.3.2 followed a linear pattern. HT/P would attempt to generate a brief description of the event and then seek collect evidence. After collecting evidence, they would seek to determine or judge what had happened. Following this converge to judgement, action then follows. All this occurs with a logical, linear and systematic set of steps.

One of the most interesting points on the diagram is how the evidence collected by the HT/P converges into one judgement point, arrived at by the HT/P. This point can be observed in examples from section 4.3.2. In these examples, the HT/Ps would not just rely on one data point. They would often seek what happened from multiple individuals. However, after collecting this data, the HT/P would converge this data in a brief rationale and then a set of actions.

Linearity could be considered to be a form of complexity management. Working through situations linearly, at speed, reduces the potential for disruption by unpredicted variables. Also, by converging the data into a single point of action, the situation is simplified. Remaining within the confines of the immediate incident, i.e., not delving into the past, not considering what could happen going forward are examples of the HT/P maintaining simplicity and linearity to the incident. All these factors associated with linearity are related to the management of complexity: they serve to minimise the complexity allowed to emerge from the situation.

### Following Hierarchy

There have been some examples throughout this case study that have implied that HT/Ps within the Self-Aware stage work within the hierarchy. In section 4.3.3, I outlined how HT/Ps would delegate according to hierarchy - they sought advice and guidance from their governors or to inform them of the immediate situation. Also, section 4.3.2 outlined how HT/Ps would use their deputy HT/Ps to support their process and actions – these involved directly delegated tasks. Teachers or employees from outside the immediate situation were rarely referred to in understandings and acting within

the incident. This combination suggests that the HT/P maintain the hierarchical chain within the organisation – those above are informed or sought advice, while those below are actors or facilitators of the action.

How the HT/P sought to understand the situation and also demonstrates also reinforces the force on hierarchy. In section 4.3.2, I outline how the process of understanding and deciding the actions required as a private affair; those around the HT/P feed in information, the HT/Ps themselves would turn to themselves to decide what happened and what they need to do next.

### Works Within the Policy

When explaining their understanding of the situation, or deciding how to act, HT/Ps use the policy and apply them to meet their needs, knowledge or priorities.

Those within the Self-Aware stage made greater reference to policy. In response to the hypothetical critical incident, C1 response prioritised the appropriate safeguarding responsibilities. C2 corroborated C1, stating how they would expect the HT/P to *“Speak to safeguarding...seek advice from the LEA”* and C3 *“she would be professional and follow procedure”*. Given that these hypothetical wicked problems were designed not to have a concrete policy response, it is ‘interesting’ that the HT/P chose to turn to the policy within their response to the incident. By understanding the policy, the HT/Ps would understand the rules, before deciding what action to take.

However, further reading into these examples suggests that HT/Ps might seek to apply the rules as oppose to using them beyond question. While C2 suggested that they would seek advice, C3 would only *“follow procedure”*. Other examples suggest that the relationship between policy and action is complex. In considering their response to the hypothetical critical incident, E1 acknowledged:

*...the fact that they [child] are related to a school governor shouldn't make a difference, it would probably be against the rules to do otherwise, but I would probably go chat to them.*

Across these examples, I suggest that the HT/P use policy loosely - while interested in policy, the HT/P does not follow the policy without consideration.

This evidence has implications for how HT/P perceive complexity. If we consider the policy as a set of rules and procedures for action, HT/Ps within this stage do not follow these without consideration.

Using policy for the rules reduces the complexity of the incident by providing a frame of reference for the incident. However, the HT/Ps within this stage potentially seek to apply the policy according to their understanding of the situation. Here, the HT/P demonstrated an understanding that the complex organisational tasks do not fit into policy nor procedure neatly and thus require consideration as to how appropriate the policy, if at all, aligns to the situation.

### ***4.3.7 Summary***

In bringing these sub-themes together, I will now attempt to summarise the awareness and sensitivity to organisational and individual complexity. In summary, individuals within this stage group:

- Focus their attention on the immediate situation.
- Seek to impose a form of conceptual simplicity, through coming to judgement and then acting with speed.
- Look to apply the rules to the situation.
- Work to a linear model of action.
- Work within the hierarchy of the school.

## **4.4 Headteacher/Principals within the Conscientious Stage of Adult Ego Development**

### ***4.4.1 Introduction***

Through the themes that emerged from the data, I will describe that HT/Ps within the Conscientious stage demonstrated some substantive differences compared to those in the Self-Aware and Individualist stage. Many of these themes build directly on what was observed within the Self-Aware stage. However, I will also demonstrate how HT/Ps would engage in a range of responses that would suggest that they were still potentially uncomfortable with the degree of complexity which they had begun to uncover.

### ***4.4.2 Comprehending and Responding to Incidents***

#### **Information Gathering**

In addition to seeking hard data, HT/Ps within the Conscientious stage would look for information that would suggest the causal mechanism behind what happened. First, they would seek to establish the reasons why people were concerned about specific incidents. For example, in responding to the

hypothetical critical incident, K1 reported how *“I would ask deputy HT/P ‘why you are concerned? Find out who the class teacher was– identify their concern etc.’*. K2 corroborated this theme in their response to the hypothetical critical incident. K2 identified that they would expect the HT/P to ask about the incident and if they had any concerns over the parent. K3 would expect their HT/P *“to ask, from my position on the governing body, if I was worried about this particular governor”*. In response to the hypothetical critical incident, Participant L1 noted, *“I’d expect they would want to know why I thought this had happened, or if I had information that might have explained the parents’ behaviour.”* Participant L3 also corroborated how this HT/P would demonstrate an interest in information associated with the cause. L3 described how a meeting had been called to discuss the progress of a specific child. The child in question was now being considered for more formal sanctions. In describing the HT/P’s approach to a specific governor meeting, L3 described L1 as:

*keen to share why they thought this behavioural incident had occurred and why the school had so far failed to bring the child back into line.*

In both examples, the HT/P placed a priority on providing or seeking out reasons why the incident had occurred. This finding suggests HT/Ps within this stage group are seeking information that could establish potential causes, but also going this by using those around them to determine the extent of the concern.

In summary, HT/Ps within the Conscientious stage go beyond hard data. They look for the suggestions or ideas of others in establishing the cause, or logical rationale, within the incident. They also look to establish the concern of those involved in the incident.

## Diagnosis

HT/Ps within the Conscientious stage would take the information and engage in a process which, I have described, as ‘diagnosis’. Within the dialogue of describing the incidents and rationale, HT/Ps would weigh up the reasons and patterns behind the incident generated by themselves and those around them. This process would eventually establish a causal mechanism or a logical rationale which could then inform the HT/P of their subsequent actions. Participant I1 provided an example how they would weigh up the information from different sources before taking decisive action. After working with the teacher in question for some years and experiencing their response to other school initiatives: *“it became clear that I didn’t share her philosophy of children and my commitment regarding achievement and teaching”*. I1 then described how information from students, parents and others *“strengthened the case”* for the teacher’s removal. The diagnosis here comes from the

assessment of the teacher's attitude. In this case, a diagnosis of incompatibility, which in turn informs next steps. Those around the HT/P noted how they achieve an understanding of the same. I2 described the HT/Ps reasoning in how I1 wanted to handle a staff performance concern involving an established teacher within the school:

*[they] talked me through the situation what decision she made and what the journey was in getting to that decision, it was a bit like [they were] telling me what was going on inside [their] head, all the to-ing and froing...*

Another example of this diagnosis in action comes from participant J2, explaining how this approach to diagnosing the situation. On speaking to the HT/P about a behavioural incident with a student during an observed lesson, J2 reflects on the following:

*So I feel that they start from the point of judgement: I know exactly what you're thinking, and I can help you understand how you're thinking because you don't yet, and I'm gonna work on that rather than talking about the issue that you want to talk about.*

In this example, it was clear the HT/P had built up a judgement of the situation, a diagnosis, before the meeting. This diagnosis was now the HT/P's modus operandi and was informing the decisions made.

In achieving the diagnosis of the situation, HT/Ps within the Conscientious stage would seek to work with a limited number of variables. Within the decision-making process, they would initially work with several different explanations. However, the focus of the HT/P would then be a focus on a key factor that would be the focus of their action and subsequent discussion. The following excerpt from an interview provides a model example of how this theme appeared. L1 decided why a member of staff had performed poorly in recent weeks. They had not been fulfilling school policy requirements:

*When I sat and thought about it...it was clear to me that stress was the key factor here. When I realised this, it became clear to me what I needed to do next and how I could help.*

J3, in referring to a recent meeting with the governors around pupil progress, "I remember J1 asking 'What's the core idea here?' I think J1 wanted us to focus in on what the priority was". Examples above also demonstrate this approach: I1 had reached a judgement that the values were out of sync,



and J1 decided the problem was J2's perception. Across these examples, the HT/P has focused on one variable over the others. While there is recognition that the situation is complex, in coming to decide what to do, they will seek to focus on a variable or causal factor.

In summary, the HT/P is demonstrating how the diagnosis (or judgement) they have placed on the situation provides the rationale for action. HT/Ps described the process of reaching a judgement on their own and not in conjunction with those around them.

## Planning

Planning both their interactions and response to the wicked problem was a strong theme for individuals within the Conscientious stage. Throughout the individual cases, planning emerged as a strategy following diagnosis. The HT/P would look to establish a plan of action to guide the situation toward an intended outcome. F1 described how their preparations for a significant external visit:

*Documents, paperwork, plans and colours in the order that it would be expected to be used...the head told me it was really important to sit down with the staff and remind them of what we are trying to get across and the detail they need to use...*

Those around the HT/P also corroborated this theme. F2 described a situation whereby F1 was preparing for a governor's meeting around exam performance, following a slight decline from the previous year's performance. F2 described how F1 would examine the situation "like a scientist, asking questions and drilling down to the detail". These examples begin to highlight the detailed planning that a HT/P would undertake.

In another example, M1 described their process of moving a member staff from their post. Each subsequent step was methodically planned. M1 described how they would handle each incident as the process of securing this outcome:

*acquiring evidence... I would move from supporting the individual through coaching, to slowly increasing the number of observations...over time I'd acquire the evidence I need to support them moving on.*

M2 and M3 supported this planned approach. In the hypothetical critical incident, M2 anticipated that M1's first action would be to plan their response to the incident. M3 described how, during their preparations for a governors meeting, that the HT/P had planned for a particular outcome:

*They talked to me, the deputy, the other governors, one-to-one, before the meeting...so M1 knew what the perspectives were of others.*

This form of preparation could be considered an act of planning.

HT/Ps would even plan out their interactions with those around them. HT/Ps would often spend time writing out scripts and rehearsing interactions they would have in meetings or one-to-one. A common example of this planning was in how HT/Ps would plan the conversations they would have. J1 described how, before the meeting with the school governors, that they “*sought out some space...I then wrote down what I would want to say*”. These notes would provide a script for the meeting. This was also the case for H1. An incident had occurred, which meant that there was substantive disruption to one of the school’s statutory examination duties. This required H1 to inform the Governing body. H1 described how they wrote down a script and practised it before the phone-call with their governor. Those around both these HT/Ps verified these observations, such as this observation from H3:

*read out what was in front of [them] ... [their] eyes rarely, if at all, moved from the paper... “[they] would plan what she was going to say and collect the fine detail behind her plan...this was focus of [their] efforts. [They] then set up a meeting with me to discuss feedback before governors meeting discusses [their] report and anything [they] might need to know coming up.*

These examples build upon the theme of detail outlined in the paragraph above: the use of a script granting the opportunity to plan out the points they wish to deliver and therefore how they can guide the conversation.

Across these examples, the theme of planning is consistent. The specific examples of planning conversations illuminate the detailed, methodological approach that characterises HT/Ps within this stage.

## Support

Support was a theme that emerged from the data. One way which HT/Ps within the Conscientious stage would provide support is through seeking to provide support themselves proactively. A sub-code emerged from the data; “*I must help them*” in response to an emerging theme that was unique in this group of HT/Ps. The keyword in this theme was ‘I’. HT/Ps within the Conscientious stage

would often seek to provide the support in these situations personally. In some incidents, this theme emerged as simple phrases: *“I knew I had to do something for them”* [I1]. Detailed examples of the incidents also demonstrated how the HT/P within this stage would personally handle the support required. For example, L1 needed their member of staff to follow a policy around student expectations. After the member of staff breached policy, the HT/P approached the member of staff to explain expectations and *“I also asked if [they] needed resources/help to ensure [they] was successful in meeting the expectations.”* Those around the HT/P also identified these behaviours. L2 identified an issue to do with behaviour management in the classroom and how they would proactively support those around them and model good practice. L3 is keen to *“get their hands dirty”* in response to behaviour incidents:

*Quick to step into behaviour, will help to remove the child and take him or her away...but it is always done through discussion...L1 is very supportive.*

In these examples, the HT/P has engaged directly in supporting those around them.

Examples suggest that the HT/P focused on those they determined to be either the victim or unfortunate. J2 described how the HT/P *would “support the victims in the situation”*, and J3 anticipated how they would expect their HT/P to do the same:

*seek to speak to the child and the parents...and establish from other services what support is already in place child.*

In all these situations, the HT/P would identify an individual who will require support because of the incident.

HT/Ps within this stage would identify an area of concern that would be the focus of the support. Following a breach of school protocols around examinations, H1 identified that overworking a fellow member of staff was the cause of the incident. H1 goes on to describe:

*There’s now that the underlying issue of, well, have we got somebody is juggling too many balls at these pinch points throughout the year? We need to do something to support her...to make sure that that doesn’t happen.*

H2 and H3 also noticed how their HT/P would seek to provide support: *“[they] would be concerned about the welfare of the child and what we need to do to help”* [H2]. H3 noted that a substantive

issue of behaviour had forced H1 and the governing body to consider exclusion for one of their students:

*[they] spent most of the time talking about the impact on the child...their priority was getting the decision to exclude right for the child.*

in all these examples, the HT/P identified a victim – a focus point for their attention. This individual, or those individuals, would then receive support from the HT/P.

## Summary

HT/Ps within the Conscientious stage focused on obtaining information to establish what the concerns were and why this was happening. They would ask others about their concerns and look for evidence. Subsequently, HT/Ps would use the information obtained to establish a logical rationale and a plan of action. HT/Ps demonstrated that they would use a range of information and would then mediate their response based on the individuals involved. Specific support, often through the HT/P, would be provided for individuals considered vulnerable or having been negatively affected by the incident.

### *4.4.3 The Role of Others in the Incident*

The HT/P would make use of a trusted set of advisors. These advisors performed two main roles – for the HT/P to share their true perception of what was happening and to provide a sounding board for their ideas. Most of their interactions around critical incidents occur around those formally involved within their leadership team. However, when we look closely at scenarios, the role of others is substantively different from those of other stages.

One of the special roles that these individuals play is in providing a space for the HT/P to share their deeper, less socially acceptable perception and response to the situation. G1 described a situation in which a specific member of staff was presenting a challenge to the whole school and their implementation of specific policies. After G1 had a difficult meeting with their member of staff, G1 sought out their deputy HT/P to discuss the meeting. For G1, this encounter with their deputy HT/P offered an opportunity to release their true feelings on the situation:

*I told [deputy HT/P] how outright rude it was for [them] to challenge me in front of [their] students...I could not believe it. I managed to hold it together in front of [member of staff] but felt like I could explode.*

Later, in the interview, G1 commented how *“I feel like, in those situations, I can take the mask off... I don’t need to be so calm around them...”*. Deputy HT/Ps and governors also corroborated this theme. H2 described what happened after an issue arose with a member of staff, which H2 had been line managing, had raised a compliant directly with H1:

*H1 took me aside, and we talked through the situation with [member of staff]...we have a close relationship and felt like they could tell me the truth...sometimes [they] would get upset... swear sometimes...I suspect I hear the story that H1 wouldn’t tell anyone else.*

In both these examples, the HT/P has behaved differently depending on the audience; with select individuals, the HT/P will release their emotive response to the situation that might otherwise compromise their position with other staff members. To others, they present a calm outward exterior.

In addition, these trusted individuals would also provide validation for the HT/P’s understanding (or logic) and the plan of action. In generating the action plan outlined in section 4.4.2, those around the HT/P provided validation for either their logical rationale or their intended action. Both H1 and J1 referred to using others as a sounding board. In a more specific example, such as managing a staff discipline issue, M1 asked *“was I being unreasonable?”* about their decision to challenge the member of staff after a serious breach of school policy. K1 faced an incident which involved having to exclude a vulnerable child due to their impact on the rest of the school community. They used others to validate their logical rationale by making use of a trusted senior HT/P to talk through a decision that they wished to make:

*At the end of the day and the rest of the staff had gone home, I gave X a ring. I always found it helpful to talk through what I wanted to do. Especially I had not seen anything like this before.*

In both these examples, the HT/Ps had an idea of what to do but would seek out others to seek out reassurance and validation of their idea.

Indeed, Participant I2, in reflecting upon their meetings with their HT/P:

*These meetings would start as a discussion 'how could we...' and people could speak openly...but it would usually end up with us being a directed end product...[they] guides us to how [they] would do it.*

Some HT/Ps also remarked on this more subtle approach. I1 outlined how they would lead the conversation to the point of view, or decision, that they were looking to achieve:

*I knew what I wanted to achieve in that meeting...prior to this it was about putting all the pieces in place so that we move forward.*

The approach also included pre-meetings with other governors to discuss what they were trying to achieve. These statements confirmed that the HT/P was, despite sharing their thinking around the incident, not seeking to analyse their understanding of the situation.

In these examples, the HT/P is still in control of the decision-making process. While differences between HT/Ps in Conscientious and those in the Self-Aware stage are substantive, the processing remains in the hands of the HT/P. Thus, the group of advisors provide emotional containment and validation for their ideas.

#### ***4.4.4 Comprehending and Interacting with Feelings***

Within the specific responses and general comments on leadership, HT/Ps tried to minimise feelings from the decision-making process. This theme presented itself both within passing comments by those around the HT/P and within organisational expectations.

Some of these comments were within the organisational expectations set by the HT/P. For example, HT/P F1 highlighted how they were a “no shouting school”. Part of the reasoning behind this was the need to minimise feeling when handling the situation. Their colleagues also corroborated this finding, with F2 outlining how the HT/P would “probably go and calm down somewhere”. However, these were a commentary on their habits of the HT/P, I1 highlighting how “they would take a walk” in light of the situation or I3 would “talk me through what they were thinking” before addressing what needed to happen. Others highlighted their overall judgement, with HT/P F1 going as far to say that “emotions make for bad decisions”. In all these examples, the HT/Ps have proactive measures to remove or reduce the feelings within the incident either systematically, through using cultural expectations/structures and through their habitual behaviour.

Although HT/Ps within this stage did not recognise the role of feelings in decision making, they demonstrated that events could generate feelings in those around them. HT/Ps within this stage would seek to ask about the feelings of others. For example, L1 identified, in a discussion following on from the main incident, that they were concerned about their staff well-being and that their response was to set up a well-being week. G1 expressed concern of having a negative impact on their staff after challenging a member of staff on their conduct:

*I do wonder if I was too harsh on them, I asked my [X] just to check on them, later on, to see if they were ok.*

G2, outlined that their HT/P, when asked about how they perceived their HT/P was “*caring... they ask how I am doing*”. Across these examples, the HT/P is aware that incidents can instigate feelings, and they are concerned enough to inquire about the impact on those around them.

#### ***4.4.5 How Others Experienced the Headteacher/Principal***

Analysis of the responses of those around the HT/P revealed three themes. First, those around the HT/P would describe them as a list of qualities or traits. Second, HT/Ps within this stage were considered to take a logical, rational approach. Finally, despite this logical, rational approach to understanding the task, HT/Ps would choose the moment to express their unfiltered response to the situation.

The explicit statements made by those working around the HT/P within the Conscientious stage would often describe the HT/P in the attributes or qualities which they demonstrated. For example, I2 “[they’re] *very calm, [they’re] is a listener*”. I3 described the same HT/P as “*decisive*”. L2 described L1 as “*an empathetic person – [they] are trying to listen to others*”, and L3 “[they] *are supportive – they do a lot to show they care for their staff*”. K1 was described by K2 as “*effective*” and K3 as a “*good team player – they manage to keep their team, including us as governors, onboard*”. Analysing the format of these responses creates an impression of a list of objective qualities or attributes; very rarely were they combined with rich examples, nor were their analysis of the individual particularly deep.

Evidence from across the themes mentioned thus far suggests that those around the HT/P experienced them as logical and rational individuals. As outlined in section 4.4.2, HT/Ps would look for reasons and establish a rationale for the incident, and proactively look to remove feelings from the decision-making process (section 4.4.4). On the other hand, HT/Ps would expose their select

individuals within the 'Jedi Council' to their unfiltered response to the incident. These were, as described in section 4.4.4, raw expressions of their thoughts. These included swearing and comments on the incidents that were inappropriate for the wider school community. Hence, while HT/Ps in this AED stage seek calm and logical rationale, they are also experienced as willing to 'release' their impulses when they recognise it as safe to do so.

#### *4.4.6 Comprehending Complexity*

There are four key themes which capture how HT/P comprehend and interact with complexity:

- Patterning. HT/Ps demonstrated an emerging interest in causality and reasoning behind the incident.
- Focus within the incident narrows over time. HT/Ps in the Conscientious stage recognise the complexity of organisational life but limit their actions to core reasons variables or avenues of support.
- Imposing predictability. HT/Ps would implicitly seek to simplify the situation and impose plans to minimise complexity.
- Limited role of policy.

##### **Patterning**

HT/Ps within the Conscientious stage demonstrated an interest in establishing the cause behind the incident. As outlined in section 4.4.2, HT/Ps would actively seek out what others felt had caused the incident. Also, in the same section, it was clear that establishing cause was a priority for the HT/P. The consistency from across the case studies indicates that HT/Ps within this stage are increasingly interested in not just the incident itself, but why these incidents have occurred and would entertain a wider set of reasons and rationales than HT/Ps in the Self-Aware stage.

Crucially, the HT/P remained in control, establishing the causal mechanism behind the incident. Although, as outlined in sections 4.4.2 and 4.4.3, they would seek out the opinion of others, it was for the HT/P to privately make sense of the information provided, piecing together the situation to provide the correct diagnosis/judgement then. Also, as the data in section 4.4.2, reported that there was a degree of linearity that remains in the causal mechanism they establish. Although they identify other perspectives and variables, one primary variable is the focus. The plan of action remains built around this identified variable.



Whilst patterning is a theme, I also suggest that establishing a cause is an extension of predictability. A cause or diagnosis provides a model/theory which can be used to summarise the situation. Also, establishing cause allows individuals to limit the number of variables involved and the potential actions that they could then take. Establishing the cause, especially early on, reduces the complexity of the incident and makes the situation easier to predict.

### Focus within Incident Narrows Over Time

As outlined in section 4.4.3, HT/Ps would seek out perspectives and opinions, the thinking process of the HT/P would then reduce the number of variables to a neat, well-prepared theory for action. However, HT/Ps would then seek to reduce the number of variables into what they felt was the core reason or factor behind the incident, which would form the basis of the plan. I also observed this finding in how HT/Ps would seek to support those around them. In section 4.4.2, the HT/P would seek to work with those they considered significantly impacted by the incident. Across the two examples in this section, while there is an acknowledgement that the situation can contain multiple interpretations and explanations, the HT/P will seek to focus on a key variable or idea.

These examples give two insights into how the HT/P perceives complexity within the situation. First, compared to the HT/Ps within the Self-Aware stage, there is a recognition that situations can contain greater complexity than one variable or what might initially emerge. However, despite this, the HT/Ps will then 'zone in' to a priority/focus. By doing this, they manage the complexity of the situation, and the complex situation becomes conceptually simpler than before.

### Imposing Predictability

HT/Ps within the Conscientious stage employ many tactics which that suggest that they seek to impose elements of predictability within the situation. The first way of imposing predictability was the use of meticulous, detailed planning. The codes 'Planning' and 'plan of action' were a consistent feature of HT/Ps would respond to the incident. In section 4.4.2, I presented several examples of concrete planning routines, including conversations, pre-planning prior to a meeting and the use of a script. The need for detailed planning arose from a need for consistency and, thus, an attempt to impose predictability. In F1's response "*I need people compliant – no mavericks thanks, we need consistency for the children*". Their deputy HT/P, F2, also reflected that the HT/P believed "*we all need to be at the same level...winging it would cause discomfort*". I1, in planning for their governor's meeting, had discussions with every member of the governing body prior to the meeting "*this helped me to direct the meeting in the manner I felt it needed to go down*". I2 and I3 both reflected

on how conversations would usually go into the direction they pre-determined. This example is further evidence for how they use planning to control the path the incident evolved down, increasing the predictability within the event.

The briefing of others was a detailed process. Examples of task responses demonstrated that the HT/P would seek to shape the reaction of those around them included:

- Reminding their subordinates of their expectations.
- Providing specific instructions on how to fulfil the task allocated to them.
- Communicating the outcome that staff members would be expected to achieve.

These two findings demonstrate that HT/Ps within the Conscientious stage seek to impose a form of predictability within complex tasks. As outlined above, Conscientious HT/Ps can recognise a comprehensive set of variables within the incident itself and will engage in patterning. However, when it comes to forming the action plan, the HT/P will seek to reduce the number of active variables within their decision making. Through planning their responses, the HT/P could contain the emergence of newer variables. Through explicit instructions, they could anticipate and restrict the actions and outcomes of the subordinate. Crucially, HT/Ps within this stage appear to seek to simplify the situation, despite seeing a broader range of variables, by actively managing to reduce the number of variables involved and by coming to a diagnosis.

### The Role of Policy

In responding to critical incidents, HT/Ps within the Conscientious stage made no main references to policy through the interviews.

#### *4.4.7 Summary*

HT/Ps within the Conscientious phase look beyond the incident itself and seek to establish a cause using insights from those around them. These insights would inform a thinking process which would seek to establish a predictable logical rationale behind the incident and a concrete plan for going forward. These HT/Ps maintain a small group of trust advisors – a ‘Jedi council’ – that provides validation, delegation and a safe space for the HT/P to express their response to the incident. They would show an interest in the feelings of others but would proactively seek to remove feelings from the decision-making process or view these as a barrier to making a good decision. In responding to these critical incidents, HT/Ps would seek to support the ‘victim’ of the incident and identify appropriate support - often, they would seek to provide this support themselves proactively.

## 4.5 Headteacher/Principals within the Individualist Stage of Adult Ego Development

### 4.5.1 Introduction

HT/Ps across the Individualist stage demonstrate several unique qualities in their responses. HT/Ps would seek out a wider range of information that included the less tangible insights of those around them. They would allow for an understanding to emerge following subsequent interactions with those around them, seeking to co-construct their understanding with others. Indeed, others within the organisation play a central role in how the HT/P would comprehend and respond. They would seek out the perspectives of a wide range of people, the reasons behind the incidents and their assistance in building a combined understanding of the incident. Furthermore, HT/Ps gave feelings a central role within the incident and sought to understand the feelings of those around them. Those around the HT/P described them as having a capacity to resonate deeply with others and see further into incidents. The HT/Ps within this stage also comprehended many features of the complexity within the incident.

### 4.5.2 Comprehending and Responding to Incidents Information Gathering

HT/Ps within the Individualist stage differed in the information that they sought from those around them. Akin to other case studies, HT/Ps within this stage would seek out data and recollections about the incident. In addition to this data, HT/Ps within the Individualist stage also sought out information that was not quantifiable but offered other insights into the situation. For example, in approaching a parent involved within the incident, participant S1 stated that:

*I must speak to [them] in person. When something is over the phone or email, there is not back and forth... you cannot hear the tone of voice or body language...I feed off that.*

In this situation, the HT/P sought out information that was not quantifiable. They sought out clues from the feelings expressed or physical state of the individuals involved. P1 also highlighted the need for information beyond dialogue; “I want to ask, ‘what do you think is happening here?’... you know...get the real insight”. In the hypothetical critical incident, T1 described wanting to meet those involved “there is likely to be truth on both sides, I would seek to meet them to tease this out”. T2 and T3 also anticipated that T1 would want meetings with the parties to understand the situation, in the words of T2, “from each person perspective”. R1 also recognised the phrase “weight of the world

*on their shoulders”* from the hypothetical critical incident and highlighted that *“there’s the situation, and then the feelings and what it’s like for them – I need to try to comprehend both...”*. These observations are recognition that more than the quantifiable facts will be needed to comprehend the situation.

In these examples, HT/Ps within this stage are going beyond what is quantifiable. In addition to the data and recollection of incidents, HT/Ps are seeking informal insights, ideas and intuitive judgements of those around them. HT/Ps were happy to work with less tangible information to achieve an understanding that goes beyond what was observed by those around them.

### Emergence

HT/Ps in the Individualist stage were comfortable for their understanding of the situation to emerge, as they gave the space and time for new information to come to light. P1 described how they were intending to roll out a new school policy, which had significant implications for performance management. P1 outlined the importance of allowing new information to emerge in relation to people’s perspectives on a whole school policy. Q1 described how they supported a member of staff who had been accused of unprofessional conduct by another member of staff. Q1 described their initial discussion with the accused and accuser, to understand the situation from each perspective. However, Q1 then allowed for emergence through several strategies. First, they allowed for a period of observation:

*I would watch how X would interact with other members of staff...coffee time, the corridors... this allowed me to see that this was more complex than one side over the other, and I needed to keep asking questions.*

Second, Q1 would use conversations with other members of staff to gain further insights. Finally, they sought support and insight with a trusted outsider. This process informed Q1’s plan to involve occupational health for Y and to consider how X could reflect on their impact on others. In this example, what is key is *how* the HT/P has told this story - as new information comes to light, the understanding shifts accordingly. Crucially, Q1 does not force the situation; Q1 continues to interact with their environment until they are satisfied and seeks to understand the situation in an open-ended way. This open-ended approach was supported by Q2 when discussing career opportunities; *“At the end of our conversation, [Q1] said ‘Let’s keep talking about this’”*. In continually interacting with their environment, Q3 identified that Q1 *“strikes a balance between responding to the environment and listening to [them]selves.”* Across these examples, the HT/P is allowing information

to emerge; they are proactively seeking to keep situations open-ended and using each re-immersion to achieve a deeper understanding or to try to understand the situation in a different light.

S1 expressed frustration with the 48-hour window within the hypothetical critical incident:

*Two days isn't enough time for the truth to come to light...I'd want to see how things evolve following the phone call...see how the pupil is like the next day.*

S1 recognised that the situation would continue to evolve and change following the initial stimuli. S2 and S3 made direct reference to this: S3 described how they would anticipate S1 to monitor the situation after the 48-hour window for what happened next with the teacher. S2, in describing how S1 handled a challenging parent who began a campaign against the school, recalled that their first step was to arrange a meeting for two weeks' time: *"they wanted to learn more, to see what came out of conversations with those around them first..."* By putting the meeting into the future, the HT/P permitted for new information to arise around the family/situation, and thus facilitated emergence.

HT/Ps and those around them would discuss the need for time to think and reflect while they are making their decision or thinking about what they need to do next. These references were considered part of the response to the incident. R1 identified a situation with a student who was causing significant and disruptive behaviour across the school. Staff were not sure how to involve the child in the wider school community, given the child's imminent departure from the school. R1 discussed how, after speaking to a couple of members of staff about a behavioural incident with a student, they would engage in reflection by *"using the time to test out different scenarios in my head"*. Furthermore, HT/P T1 described their reflective process. T1 outlined that a complaint had been made by a parent in relation to the school meeting the needs of their child:

*I reflected on what happened in the conversation, reading how [they] [were] – listening to how [they were] responding to the situation and my approach. Do I need to change tac?*

Crucially, as outlined above, these points of reflection were throughout the incident and not just at the decision-making stage. In these examples, the HT/P valued space and time for rumination. The specific examples and the rich internal monologue suggested that HT/P's would seek out a moment to talk through the image that had developed so far and the next steps they would take next.

## Co-Construction

HT/Ps within the Individualist stage involved those around them in making sense of the situation. This involvement of others was evident in HT/Ps descriptions of how they would make sense of the situation, their dialogue and purpose behind the conversations that took place.

In establishing how HT/Ps worked with others to build understanding, I established the co-construction code. For the code co-construction to be applied, the following themes had to emerge from the data:

- Evidence of processing the new information. Reflections that the HT/P's picture was adapting/changing following individual conversations.
- Evidence of a genuine two-way interaction around understandings of the incident. The HT/P would be asking more questions about their perspective and exploring the detail. There would be the sharing of a rationale or an idea followed up with questions seeking the perspective of the other people involved.
- Direct feedback relating to the HT/P's capacity to make others feel heard.

Through discussions with others, the HT/P would slowly build a picture through questioning and discussion. An example incident for T1 surrounded a parent complaint. Following a conversation with the parent to understand their concerns, discussions with the Chair of governors took place. This discussion highlighted that this incident had been an ongoing concern. T1 noted how this new information prompted discussions with several members of staff.

*I told X that I understood there was a complaint, and this had been going on for a while. I asked X about what had happened with Parent Y in the past...X shared the frequency of requests from the parent for information...when I asked how X was feeling, X shared how this was causing high anxiety.*

This discovery prompted discussions with other members of staff, with T1 describing how this anxiety amongst staff members “*was paralysing them...what was important was this history...my staff were damaged by this incident*” and “*what was new [in this complaint] wasn't new at all.*” The feedback and discussion from T2 and Senior Leadership Team (SLT) was then incorporated into a meeting with members of staff to share their understanding “*to articulate and seek feedback*”. This scenario demonstrates that conversations had an impact on their understanding, and how HT/Ps sought to build the understanding of the incident with those around them.

Examples from those around the HT/P also corroborated the Individualist's approach to co-construction and clearly demonstrated two-way dialogic conversation. When T2 was approached by T1 about a parental complaint following a behavioural incident with a student, T2 recalled the following:

*We had a conversation about X...they asked me what I think we should do, and I said we shouldn't exclude the child from [the event]...[they] asked me why I felt this way and said that this was a special moment and a chance for them to say goodbye. [They] shared that he agreed but that we still needed to send a message and we then discussed what this message could be.*

Participant T3 shared that, after receiving a complaint from a disgruntled parent, T1 took the following steps:

*We were communicating and making sense of the complaint...we'd ask each other is this a good way to go? How can others interpret this?*

Across these examples, there is a two-way dialogue of information and feedback on each other's perspective, working toward an agreed understanding of the situation.

HT/Ps asked deeper questions to understand the underlying mechanisms from the other people's points of view – a crucial part of building an understanding of the situation alongside others. For example, N1 set up a meeting with the deputy HT/P involved in a discipline procedure. They describe how one of the purposes of the meeting was *"To know what their motives were...what else is going on for them."* P1 discussed how, during the rollout of new school policy, they would seek others for debate: *"I would ask why.... I wanted them to challenge me on this..."*. S1 described how, in attempting to resolve the incident between two parents in the school playground, they had set up a conversation with an individual involved *"[I wanted to] establish [their] expectations - how do they align with what we determine to be useful behaviour"*. Here, the HT/P is attempting to have a deeper dialogue – one that exposes motives and rationales to build a stronger understanding as to the other world view.

In attempting to understand an incident, the HT/P makes considered use of those around them. In this sub-section, I have discussed the importance of dialogic, meaningful conversations where the HT/P attempted to understand the perspective of another and to build a shared understanding of reality. Exploring the position of others and trying to relate to the individual, along with the direct

examples of HT/Ps engaging in co-construction, is evidence that HT/Ps within the Individualist stages engaged in a deep dialogue with those around them to develop an understanding of the situation that could be shared by everyone.

### Connections Beyond Immediate Incident

For HT/Ps in the individualist stage, each incident exists as part of a network of other individuals and events. HT/Ps were aware that there was often a history to each event and each event would have consequences beyond the immediate time frame of the incident. Furthermore, they recognised that individuals beyond those immediately involved would be impacted by the incident.

HT/Ps were interested in the history of the event. P1, in response to the hypothetical critical incident, referred to the following *“I would need to understand the prior incident...how similar was this, or is it a red herring?”*. P2 concurred: *“If I was this deputy HT/P [in the critical incident], I would expect [P1] to get to the to question me on what happened before”* and P3 had the same expectation. Participant Q1 described an incident with their member of staff. Before meeting the member of staff about the incident, Q1 *“recollected [the] background of the member of staff – how [they] have behaved in the past”*. Those around the HT/P also noted how Q1 would inquire about any history relating to the event or those involved. In response to the hypothetical critical incident, Q2 highlighted that they would expect Q1 to *“check through any correspondence to date, had not been overlooked – including social media”*. Q3 would expect to them to:

*gather additional information on the children...and speak to the head of governors to check if anything had happened before.*

The significantly higher number of references to previous events demonstrate how HT/Ps within the Individualist stage were interested in what had happened before the incident - both the events and the individuals involved.

Also, HT/Ps within this developmental group would often demonstrate concern for the how the event could impact upon the organisation in the future. For example, upon observing an incident with a parent in the school grounds, S1 discussed that they would need to continue to monitor the situation:

*Knowing the parent, it is likely that the parent will still be annoyed after I have spoken to her and discuss what happened...I will need to keep a watch on them.*



Needing to 'keep a watch' demonstrates a recognition that this event will continue to influence their interactions with the school and its staff. Participant S2 has also observed participant S1 continues to act beyond the immediate time frame of their intervention. In discussing some of the work around their development, their HT/P "*would ask me how things were going and if there was anything else [S1] could do to help me*". These examples illustrate how HT/Ps within this stage conceptualise the objects within their organisations as loosely connected - they can see there is a past and that, even beyond their actions, that the event will continue to play out within individuals and the organisations itself. In section 4.5.6, I discuss the relevance that the analysis presented in this section has for the overall perception of complexity within this stage.

### Providing Support, Development and Feedback

When HT/Ps responded to the incident, they would seek to provide support, development and feedback. In providing support, the HT/Ps demonstrated a considerable interest in a holistic approach to supporting both individuals and the organisation. I use the term holistic because:

- HT/Ps would seek to support individuals beyond the immediate incident.
- HT/Ps would look at developmental needs of those involved.

The priority of HT/Ps within the Individualist stage was to put into place a plan that would continue to support individuals beyond the immediate time frame of the incident. HT/Ps, like N1, would make an explicit reference to going beyond the immediate confines of the situation. In handling a discipline issue involving staff and parents, N1 stated that "*we need to get this right for [the teacher] in the long-term*". N2, in their written response to the hypothetical critical incident, stated "*N1 will want to get this right going forward, they will keep an eye on the situation*". N3 echoed this theme in responding to how they perceived their HT/P "*N1 does not take [their] eye off the ball*". Although simple, in combination with the developmental focus on their staff (section 4.5.3), this suggests that HT/Ps, while looking at how to relieve the incident, recognised the situation would continue to have ramifications and would continue to support those involved in the long term.

In identifying those who needed support, HT/Ps within the Individualist stage looked beyond the initial individual and immediate boundaries of the incident and interested in a deeper provision of support. In response to the hypothetical critical incident, participant O2 discussed how their HT/P would be "*interested in the welfare of the family*" and participant O1 "*are the family ok*". Participant M2 and M3 highlighted how they would anticipate the HT/P attending to the whole family's needs, with the HT/P M1 describing "*how the family need support and help, rather than a fine*". These

examples demonstrated how the HT/P was thinking beyond fixing the attendance issue and beyond the child who was late. Instead, HT/Ps looked to those around the incident to identify any support needs.

The themes explored within this section suggest the HT/P within the Individualist stage focused more on the incident within the broader context of the school. It would appear that HT/Ps within the Individualist stage would hold the needs of the wider community while also responding directly to the individual incident.

### Summary

HT/Ps within the Individualist stage hold a comprehensive and complex perspective of the incident the two words which can summarise the HT/P's approach to incidents are 'wide' and 'grey'. First, to explain the choice of wide. HT/Ps take a wider set of information beyond hard data and observation from a set of colleagues that goes beyond the traditional school hierarchy. They also consider how they need to support a wider range of individuals that are impacted on by the incident. The word 'wide' also applies to chronology; HT/Ps in this stage group are interested in what has happened prior and what could happen next. In summary, the use of the term 'wide' describes how the HT/P holds more of the organisation as they understand, process and respond to an incident.

Another word is 'grey'. To be 'comfortable in the grey' is a colloquial term, which usually refers to going beyond the binary conceptualisations of an incident. First, as described above, HT/Ps would seek out information that was not definitive. Furthermore, these HT/Ps were comfortable with allowing for their understanding to emerge from discussions and reflection. In both examples, the HT/Ps are working and accepting the situation as a changing, non-too-definitive picture.

### *4.5.3 The Role of Others in the Incident*

HT/Ps within the Individualist stage would seek to involve others deeply in the understanding and response to the incident. Also, the HT/P would seek to use the incident to develop those around them. This development would not be sporadic and instead, be part of a pre-determined developmental plan.

Because the role of others was so prominent in how HT/Ps respond to incidents, I have made reference to the relevant sections in section 4.5.2 as evidence for these themes. I have made use of some direct quotes, where relevant, to empathise particular points.

## Co-Construction

HT/Ps within this stage would look to build their understanding of the situation with those around them in a mutual fashion. The concept of co-construction has been described in detail in section 4.5.2, where exemplars from across the participants highlighted how the nature of the dialogue, and experience of those around them, they would build their understanding alongside others. Also in this section ('reflection'), I outlined how the HT/P would often dip in and out of context – collecting information, reflecting on their understanding, and then returning to others to see the situation from another perspective. Thus, co-construction was an important aspect of the role of others within incidents.

## Beyond Hierarchy

The wide number of individuals offers further insight into the perceived role of others. HT/Ps within this stage would seek out a wide range of individuals to contribute to the understanding or response to the incident. Throughout the case study, Q1 has been shown to interact with a wide range of individuals outside of the school leadership. Q2 observed, in handling a support plan for a child with SEND, Q1 meeting directly with the child's Teaching Assistant to obtain more information. Q3, reflecting on working with HT/P during a pre-inspection visit, recognised: *"they know everyone by name, it's a pretty big school, they have time for everyone"*. Their network extended beyond formal hierarchy and across the different structures within the setting.

O1 described how, in responding to the written hypothetical critical incident, that they would seek advice and insight from a range of individuals involved. Crucially, each person had a different role to play: They spoke to the parent to *"explore reasons"*; the deputy HT/P's mood on responding to the incident would provide O1 with *"an insight into the complications and what we should do next"*; and the class teacher would *"approach the child...and to ensure that they continue to monitor their [children] welfare"*. Each, regardless of role within the hierarchy, played a strategically crucial role in responding and understanding of the task. Those around the HT/P, such as O2, would describe the strategic approach to the involvement of others: *"They would ask me who I think I should involve, and we would talk about why"*. From these examples, involvement in the incident was based on their proximity to those involved, to the incident itself or their ability to offer a different perspective.

## Communication

HT/Ps within this stage sought to ensure that those around them understood the situation. HT/Ps would achieve this by sharing the rationale for action and how HT/Ps would often share their

thinking process as it evolves through discussion. Participant R2 saw this theme in the use of the weekly newsletter: “[the newsletter] *is long.... the newsletter to parents outlines everything [they are] doing and why*”. R3 highlighted in the hypothetical critical incident that they would expect for the HT/P to share their thinking and, in a separate incident, how they “*felt involved in how the HT/P would make them feel involved.*” Indeed, the R1 independently shared that the purpose of the newsletter was due to the importance of communication across the school. Crucially, the HT/P extends the rationale far and wide – as R2 highlighted, the HT/P shares their rationale as far as the parents.

In working with others, HT/Ps in this stage would consider how the message could be read differently by others. The code ‘read differently’ recognised when HT/Ps made an explicit reference to how what they would want to communicate might be interpreted differently by those around them. HT/P N1 described, in preparing for a meeting with a member of staff undergoing disciplinary procedures. In this situation, the HT/P called upon the secretary to double-check:

*I asked ‘if you were X, how would you respond to this? And I showed her the letter outlining the minutes of the meeting’.*

In describing an N1 general approach to tasks, N2 described how N1 would use them to check through key messages:

*if [they] were to do a speech or talk to the whole school, [they’d] run it by me first and look for feedback. Not just me, but always his secretary and other people too.*

N3 described how N1 approached understanding the school following his appointment to the position of HT/P. N3 described how N1 met the different groups of school staff, trying to understand the school from different perspectives. The purpose of this example was to demonstrate how HT/Ps would purpose those around them to explore how others might interpret their messages, communications or approach.

This theme was also evident in evidence previously given across the case study. Q1 described wanting to see both parties to understand each person’s own reality of the situation. T1’s answer to the hypothetical critical incident highlighted this further: In section 4.5.2, they recognised that there was truth in each other responses to the incident. The need to speak widely, confirmed by T2 and T3, also recognises that there could be different perspectives of the situation, grounded in their own individual realities.

#### 4.5.4 Comprehending and Interacting with Feelings

Themes associated with the processing of feelings suggested that HT/Ps within the Individualist stage saw feelings as a key part of the incident. HT/Ps would seek to empathise with those around them, enquiring and discussing the feelings from the incident. The HT/P also showed interest in the well-being of others.

HT/Ps provided the space for those around them to express their feelings resulting from an incident. O1 reflected on how they handled an ongoing incident with a child in the school, surrounding whether the child was appropriately placed at that setting. O1 recalled speaking to the parent using *“deep listening.... I wanted to let her get how she was feeling off her chest”*. Those around O1 also discussed how the HT/P would support individuals to express their feelings. After informing the team that there was a short notice inspection, O2 described how O1 approached the situation:

*O1 said how [they] cannot do it alone, that he needed our help and said, ‘I trust you’.  
Once [they] explained the situation, [O1] sat back and let people flap...[they] then gave us a template which we could use, and we then worked together to build a response.*

In this example, O1 allowed the space for others to express their initial shock of the inspection. The framework provided an open, yet controlled, space for the team to refocus their efforts. Both examples demonstrate a HT/P who is providing a safe space for those around them to express their feelings.

In understanding the parental complaint, T1 recognised the anxiety the situation was causing. T2 stated that T1 *“asked me why I felt this way”* around the attendance of the child. T3 stated how they observed T1 seeking out the teachers involved in a parental complaint *“just to reassure teacher X..., not to get information at that stage, just because T1 knew how hard it is to do your job with a complaint hanging over your head”*. This point was evident again in R1 – not only did they recognise the feeling for the governor involved in the hypothetical critical incident, but they also highlighted the need to communicate with parents: *“to assure them – that the school is changing and moving forward”*. R2 and R3 also recognised that, in the hypothetical critical incident, R1 would have a concern for how the governor was feeling and would seek to enquire about their well-being.

HT/Ps would seek to empathise with these feelings. Empathy was one of the strongest themes that emerged from the analysis of Individualist HT/Ps. An excerpt was coded as empathy when either:

- The HT/P made a direct reference to empathy.
- A demonstration of attempting to understand the situation from the perspective of another.
- Or when described as a characteristic of the HT/P.

Section 4.5.3 outlined how the concept of empathy is uniquely popular for HT/Ps within the Individualist stage. There are explicit examples of this within the responses of those around the HT/P. N3 describes a HT/P that:

*just gets it. [they] will take the time to listen and you can see that what you've said has been taken on board.*

Participant N2 discussed how they felt after asking the HT/P for professional career advice:

*[they] shared their journey...and I felt it connected with what I was trying to say and the way I was feeling. Sharing the story made me feel understood...Empathised with*

Empathy also emerged, trying to understand how people felt about themselves. In the hypothetical critical incident, P1 discussed how they would contact a member of the governing body to enquire “*how they are within themselves*”. P2 discussed how P1 would:

*consider the well-being of the governor...they would be interested in what was happening behind the drop in absence, especially if there are known family problems.*

P3 also described the HT/P would be “*concerned for the governor's well-being*”. Across these examples, the HT/P seeks to establish the socio-emotional context which an individual's understanding of the situation is based and thus showing an interest in the cause behind their feelings.

HT/Ps within the Individualist stage saw feelings as an important factor in their comprehension, process and response to incidents. They demonstrated concern for the individual during and prior to the incident. The theme is interesting—beyond a discussion of feelings generation, there is a recognition that feelings play a role in the incident and how individuals respond to this incident, complementing a willingness to discuss feelings openly.

#### 4.5.5 How Others Experienced the Headteacher/Principal

Those around the HT/P went beyond describing the individual qualities of the HT/P. Instead, they described the impact that the HT/P had upon their work and themselves as individuals. The word 'magical' is a word that attempts to capture how these HT/Ps manage to hold their staff within their sphere of influence. Generally, people found it difficult to attach language to the impact that the HT/Ps had on them. One individual, T2, described this as a "grey, fuzzy quality". This can be best summarised by N3: "if you could bottle what they had we'd all want to buy it". Hence, I refer to the term 'magical' to summarise the mystical quality surrounding the HT/Ps within the Individualist stage.

Those around the HT/P described their HT/P as someone able to read and interpret the situation with a high degree of accuracy. For example, Q3 describes how:

*they walk into the room, they engage with those around them, and Q1 can put [their] finger right on the heart of the issue.*

P2 described a family welfare incident, which P1 had become involved in. P2 described feeling assured by their presence, on the belief that P1 can identify the issues that others cannot see. In a family welfare incident, P2 described these examples illustrate the HT/P as an individual who can tap into an area of the situation that others do see or cannot grasp.

What is clear though is these HT/Ps are not using intuition alone. In section 4.5.2 and 4.5.3, it is evident that HT/Ps have a communication plan that is thought through and checked with others. They proactively engage a wide range of individuals in both the response and understanding of the task (section 4.5.3). In achieving an understanding of the task, they work in a collaborative manner that seeks to co-construct their understanding of the incident (section 4.5.2). Empathy itself is a strong theme in section 4.5.4. Therefore, the emergence of 'getting it' as a theme is a direct consequence of how the HT/P consistently makes sense of their environment in an interdependent fashion.

Development was also another key theme. In supporting a member of staff to see their position on the child and their involvement in the community, R1 highlighted how he framed a conversation within a coaching model: "As I was talking to [them], I kept within a coaching model, guiding [them] through the conversation". Later, in the interview, R1 disclosed that he was aware the individual in

question was moving into a new role and was keen to support them as they moved into a new role elsewhere. For participant R2, the HT/P:

*moved on to relating this to where I was going next, [they] suggested that we should keep talking about my development over the next two months.*

P2 discussed how she had made it clear to her HT/P that they were looking for advance further in their career; “[they] sat and helped me look for new jobs – [they’d] go on the TES with me and look for a role for me”. P3 corroborated, stating the HT/Ps’ “obsession on moving people forward, P1 cares that they grow in the school and become better at their jobs”. O2 recognised the strategic steps that O1 was taking in supporting their career:

*I had been a Deputy or Assistant for many years. I have done my NPQH. We have a nice little team here. But I feel [O1] is preparing me for my headship by giving me more responsibility.*

These examples illustrate how the HT/P within the Individualist stage takes a longer-term view of support. HT/Ps appeared to often have a plan in place for supporting those around them. Also, HT/Ps within this stage group can see beyond supporting individuals within the situation itself. They can make use of the immediate situation to feed into the wider development of the individual.

#### **4.5.6 Comprehending Complexity**

HT/Ps within the Individualist stage appeared to comprehend several features of complexity. In this section, I will first describe how they recognised the interdependence they have on others through mutuality. Second, that many of their ways of working suggested that HT/Ps within this stage comprehended their environments as relatively unpredictable places. Thirdly, through exploring the whole picture, they recognised the vast interconnectivity that makes up their organisations. Finally, their interaction with policy suggested that rules will not necessarily provide a concrete and predictable solution, and consequently, their interaction with them is vital.

##### **Mutuality**

Holding others in a mutual frame is a consistent theme that emerged from the different sections outlined above. This theme became evident in how they involved those within incidents and who they chose to involve. In section 4.5.2, I discussed how HT/Ps would seek to work outside of the hierarchy; they involve others based on either their proximity to the incident itself or their insight



into those involved. This theme demonstrates mutuality – involvement of others was not based on formal power, role or responsibility but in what individuals around them could offer. In choosing to work outside of hierarchy, the HT/P is seeking to operate in a fashion that recognises the value of others beyond formal power structures.

The HT/Ps sought to work in a way with others that recognised their interpretation of the incident as equal to their own. Sections 4.5.2 and 4.5.3 demonstrate how HT/Ps within the individualist stage will seek to co-construct their understanding of the situation. As opposed to imposing a judgement after receiving their input, each conversation contributes to the HT/Ps understanding. When they ask others to participate, these HT/Ps seek to build consensus with those around them. Mutuality is demonstrated by how HT/Ps achieve their understanding through discussion with those around them and holding the perspectives of others as equal to their own.

### Unpredictability

HT/Ps within the Individualist stage demonstrated how they were comfortable with ambiguity. HT/Ps within this stage acknowledged that situations were relatively unpredictable and often had multiple, complex causal mechanisms operating in the background. HT/Ps in section 4.5.2 would make explicit reference both to the multiple variables which were involved in their understanding of the situation and how they would refuse to accept information at face value. Furthermore, they did not seek to either control how they establish cause, nor did they look to establish a causal mechanism straight away. As outlined in section 4.5.3, HT/Ps within this stage would seek to build an understanding of the situation through each conversation and in collaboration with those around them.

Furthermore, HT/Ps in section 4.5.2 sought information that went beyond what was quantifiable: whether this was body language or the inner theories of another person, HT/Ps would seek out subtle, nuanced messages which would support them in obtaining ‘the inside track’ of a situation. These two examples demonstrate how HT/Ps were comfortable for a clearer comprehension of the incident to emerge over time.

HT/Ps within this stage recognised that situations would have ramifications beyond the immediate boundary of the incident. In section 4.5.2, I outlined how HT/Ps would seek to support individuals who were connected to those involved – for example, if a child were involved, the HT/P would usually express concern over the whole family. Also, section 4.5.2 outlined how HT/Ps would demonstrate an understanding that their actions would lead to a cascade of events beyond the

immediate time frame of this incident. About complexity, these HT/Ps understood that this incident was interconnected to what would happen next and would seek to use this understanding to select an appropriate course of action.

## The Whole Picture

HT/Ps within the Individualist stage take a broader organisational perspective in the handling of critical incident. In section 4.5.2, when organising support for those involved, the HT/P took a long-term perspective on providing the support that all individuals within the incident might need. They would look to align their support to a longer-term plan held for their individual development. In section 4.5.3, HT/Ps call upon a wider set of individuals in understanding these incidents. Finally, in section 4.5.4, the HT/Ps did not reject the impact of feelings - they discussed the feelings generated in the incident upon themselves and those around them and the consequential impact going forward. These three themes point to a HT/P who explores incidents not just through the incident itself but in how the incidents relate to both the wider organisation but also the individuals involved. In this way, HT/Ps are embracing the 'whole picture'.

A characteristic theme of the data was an appreciation of nuance. In section 4.5.2, HT/Ps would seek out the smallest of details that would help them to understand what was going around them. In section 4.5.3, HT/Ps would look at the situation from a range of different perspectives. Section 4.5.2 highlighted how HT/Ps in this stage were capable of looking beyond those immediately beyond the situation and their hierarchy. They paid keen attention to how others around them could read the situation differently (section 4.5.2). Section 4.5.3 described HT/Ps who would seek out the views of those around them - regardless of their position in the hierarchy. Section 4.5.2 also demonstrated, alongside section 4.5.3, that HT/Ps within this stage would proactively engage in communication strategies that attempted to appreciate how others might perceive their dialogue or approach and adjusted accordingly. Finally, section 4.5.4 demonstrated the uniquely empathetic approach that was commonly identified by those around them. These themes relate to a higher perceived degree of complexity: HT/Ps within the Individualist stage recognise that their perception of the situation is based upon how they have made sense of the events and that this might not be the same as others. Also, simply sharing their understanding is not enough and more prolonged thought and consideration is needed to communicate with those around them in a way that they can take on board what is required.

## Policy

In referring to policy, HT/Ps within the Individualist stage had a different way of engaging with policy. More references were made to the policy as providing guidelines. Also, HT/Ps were more likely to refer to the underlying ideas behind the policy, suggesting a degree of critical engagement. In the references made to the policy, HT/Ps perceived the role of policy as providing guidelines within each situation. Within the hypothetical critical incident, Participant S1 made direct reference to the policy as a guiding mechanism “*policy would be guidance for action – just to be sure we have our backs covered*”. The concept of guidance was echoed by S2 and S3, who said they would expect their HT/P to look to policy for help and guidance.

Crucially, they only provide guidance. In these scenarios, the HT/Ps continued to engage in a rich process of understanding the situation around them. involvement of other for insight and sources of information, along with the approach of co-construction outlined in section 4.5.3, demonstrates how HT/Ps within this stage would go beyond policy as a set of limitations or rules to apply to the situation. Instead, HT/Ps chose to interact with policy; they actively engaged in weighing up the use and value of the policy in a specific situation.

### 4.5.7 Summary

HT/Ps within the Individualist stage handled these critical incidents in a substantively unique fashion compared to other stages. In comprehending the situation, the HT/Ps involve a wider range of individuals. HT/Ps will decide to involve others based on their ability to offer insight and not their seniority or position within the school hierarchy. The HT/P works mutually with their co-workers; they co-construct an understanding of the situation, sharing their rationale and how this understanding evolves with each interaction. Furthermore, in comprehending and responding to the situation, HT/Ps within the Individualist stage appreciate the unpredictable, interconnected nature of organisational life: they show interest in what has come before and how both the situation itself (and their response) in response will ‘ripple’ across the organisational landscape both now and in the future. A deep, empathetic understanding characterised the relationships held by these HT/Ps. Those around the HT/P comment on how their HT/P can understand the situation in ways that others cannot do. This observation is likely to be as a result of their nuanced approach to communication and how they work with others through mutual collaboration.

## Chapter 5 Discussion

### 5.1 Introduction

The reason for this research is as follows. Leadership involves influencing individuals and the organisation (Northouse, 2016; Yukl, 2002; Cuban, 1998). How a HT/P undertakes their responsibilities within an organisation is important (Connolly, James and Fertig, 2017). HT/Ps have substantive roles and responsibilities within their settings; these include finance, student outcomes and staff working conditions (DfE 2015; 2017). How HT/Ps carry out their responsibilities can therefore have substantive impact on organisations. The COVID-19 pandemic and its impact on schools, children and learning provides a contemporary example as to the extent of this impact (DfE, 2020a; Sutton Trust, 2020; Education Endowment Foundation, 2020). In carrying out their responsibilities, HT/Ps have to navigate inherently complex organisations and solve wicked problems. Such complexity and wicked problems are taxing for individuals – wicked problems are hard to define, there is no ‘correct’ answer, and pre-determined solutions do not apply (Rittel and Webber, 1973; Waddock et al., 2015; Armstrong, 2017). When faced with such challenges, individuals engage in a process called sense-making. This process determines how we come to comprehend the situation, which in turn becomes a platform for action (Holt and Cornelissen, 2014; Weick, 2001). Thus, studying how HT/Ps respond to such demands is a critical aspect to theorise within educational leadership and is one which has received little attention to date.

AED, as defined by Loevinger (1966; 1976), differentiates how individuals make sense of their environment across eight hierarchical stages of development. Each stage represents substantial differences in four key domains: cognitive style, interpersonal skills, conscious pre-occupation and impulse control. An individual’s stage of AED can be determined using the Washington University Sentence Completion Test (WUSCT). Given the potential relevance of sense-making (and, therefore, AED) to handling the types of organisations and tasks that HT/Ps are responsible for, I established the following research questions:

1. Are there substantive differences between HT/Ps who are at different stages of AED and in a) how they conceptualise and work with complexity and b) respond to wicked problems within their organisation?
2. To what extent can these differences be linked to their stage of AED.
3. Is being in the post-conscientious stage of AED advantageous to HT/Ps in their leadership work in their schools?

In this discussion, I will first review these research questions in light of the results presented in Chapter 4. Following a review of the potential limitations of this study, I will discuss the unique contributions to knowledge and practice.

## 5.2 Reviewing Research Questions

### 5.2.1 Reviewing Question 1

Question 1 was: Are there substantive differences between HT/Ps who are at different stages of AED in a) how they conceptualise and work with complexity and b) respond to wicked problems within their organisation?

I found substantive differences between HT/Ps in different stages of AED. I observed differences in five areas:

- How HT/Ps comprehended and responded to incidents that were wicked problems. There were considerable differences across a range of different aspects when the HT/Ps were asked to comprehend and respond to incidents that were wicked problems. These included: the information HT/Ps prioritised from their environment; how HT/Ps would attempt to comprehend the situations; and their strategy for engaging with a solution.
- The role of others. Other people increasingly played a more established role in how the incident was understood and responded to. HT/Ps in earlier AED stages focused on using others for providing input (data, information) and output (delegation, validation). Those in the Individualist stage of AED, worked with others across hierarchical structures to develop a collaborative co-construction of the incident.
- Comprehending and responding to feelings. HT/Ps within the Individualist stage acknowledged that feelings were an inherent part of the wicked problems that they faced. Before this stage, HT/Ps focused on their effect (Self-Aware stage) or tried to control and limit the effect that emerged within incidents (Conscientious stage).
- Perception of others. HT/Ps in the earlier stages of AED were perceived by those around them as action and task orientated. This observation was considerably different to those in the Conscientious stage, where they would be described their qualities (e.g., great listener). Those within the Individualist stage of AED were perceived to hold a deeper understanding of their contexts and were able to deep resonate with those around them.
- How HT/Ps comprehended complexity. As we move through the stages, substantive shifts occurred in the extent to which features of complexity were recognised. Moving from a

relatively linear, time-specific problem with fixed boundaries to proactively seeking a broader perspective of the incident.

These differences are summarised in Table 10.

	<b>Comprehending Complexity.</b>	<b>Comprehending and Interacting with Incidents that are Wicked Problems.</b>	<b>Role of Others.</b>	<b>Comprehending and Interacting with Feeling.</b>	<b>Perception of Others.</b>
<b>Self-Aware</b>	<p>The HT/Ps' focused remained within the immediate situation.</p> <p>Imposing simplicity.</p> <p>Causal linearity.</p> <p>Following hierarchy.</p> <p>Looked to apply the rules of any policy.</p>	<p>Collect hard evidence on the situation.</p> <p>Conduct a private sense-making process.</p> <p>Quick, timely response to an action plan.</p>	<p>Provide Information.</p> <p>Venting.</p>	<p>Less reference to the role of feelings.</p>	<p>A leader 'Get the job done'.</p> <p>Action-orientated.</p>
<b>Conscientious</b>	<p>Patterning.</p> <p>Wide and then focuses in.</p> <p>Imposing predictability.</p> <p>Limited role of policy.</p>	<p>In addition to hard evidence, they seek out reasons why from others.</p> <p>Private 'Diagnosis' – weighing up to establish a logical rationale.</p> <p>Planning – Strategy &amp; Interaction Support for identified victim</p>	<p>The 'Jedi Council' – a trusted set of advisors.</p> <p>Validation for their privately developed sense of the problem.</p>	<p>Recognised feelings</p> <p>Seek to minimise feelings involved within the incident.</p>	<p>Would list of a set of qualities: "They are a great listener"; "They are empathetic".</p>
<b>Individualist</b>	<p>Seek understanding beyond the incident.</p> <p>Emergence.</p> <p>Mutuality.</p> <p>Appreciate system as interconnected.</p> <p>Unpredictability.</p> <p>Policy – guidance.</p>	<p>Looking for the inside track: Less tangible insights, body language, inflexions in language.</p> <p>Emergence - comfortable for their understanding of the situation to gradually emerge as new information came to light.</p> <p>Co-construction.</p> <p>Build understanding with others.</p>	<p>Beyond hierarchy – HT/Ps would seek advice beyond their senior teams.</p> <p>Co-construction of their understanding of events.</p> <p>Communication - working with those around them.</p> <p>Development.</p>	<p>Empathy.</p> <p>Would actively seek to discuss how people are feeling.</p> <p>Interested in the well-being of staff and themselves.</p>	<p>Deeper insights into situations: "Magical"; "They just get it".</p> <p>Can resonate deeply with those around them: "They make me feel heard."</p>

		Support – beyond immediate situation + developmental.			
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*Table 10 Summary of Results Found in Self Aware, Conscientious and Individualist HT/Ps (Gilbride, James and Carr 2020)*

### 5.2.2 Reviewing Question 2

Question 2 was: To what extent can these differences be linked to stage of AED?

I found that the themes identified above are reflective of an individual’s stage of AED that individual was recognised to be within. I will now describe the overarching themes across the three AED groups, relating each theme to observations from Loevinger’s AED theory. These themes were reported in Gilbride, James and Carr (2020).

#### Comprehending and Interacting with Incidents that are Wicked Problems

Comparing across the three stages, there are two substantive differences in how HT/Ps comprehend the incident and their response to it:

- the type of data sought.
- planning and problem solving.

#### *The Types of Data Sought*

HT/Ps within the Self-Aware stage focus on obtaining hard data, while this evolves in each subsequent stage. HT/Ps in the Conscientious stage would, in addition to hard data, seek out reasons why from those around them. HT/Ps within the Individualist stage sought out even more intangible forms of data – informal insights, interpretations from those around them and through the studying of others’ behaviour (e.g., body language, inflexions). In summary, the pattern across these three stages is as follows: information that HT/Ps sought from the environment grew through each stage to incorporate more subjective, interpretative insights and reflections on the inner, unseen world.

Seeking out different types of data can be seen as a practical, real-world application of two major trajectories within AED Loevinger’s AED theory. The first trajectory is the gradual evolution towards accepting a more ambiguous world. In Hy and Loevinger’s (1996) description of these stages, the Self-Aware stage makes little reference to the seeking of cause or reason behind incidents (Loevinger, 1976). Rooke and Tolbert (2005) observed that those within earlier AED stages focused on obtaining hard data on the incident in question. This pattern fades away in subsequent stages. In

the Conscientious stage, the interest in establishing patterns and people's reasons for their behaviour might explain why HT/Ps were asking for an individual's objective reasons behind the occurrence of the incident (Hy and Loevinger, 1996). Bushe and Gibbs (1990) also recognised that increases in stage could be associated with diagnostic skills, which in turn could be due to willingness to accept a wider range of subjective information. Others describe development through the stages to increase tolerance of ambiguity and complexity (Manners and Durkin, 2001; Rooke and Torbert, 2005; Vincent, Ward and Denson, 2015). Hence, the greater interest in these features of problems and a tolerance of more flexible type of data might be at the root of why the HT/P held a greater interest in the subjective interpretation of others, and how they would try to use others world views as valid interpretations that could enhance their understanding of the incident.

The second trajectory is an increasing appreciation of the complexity of individuals. It is recognised that individuals begin to recognise that interpersonal communication is complex as they progress through the AED stages (McCauley et al., 2006; Joiner and Josephs, 2007). Those in the Individualist stage are more capable of engaging in dialogic approaches to understanding others (Fisher and Torbert, 1991) and engaging with such individuals critically (Merrion, Fisher and Torbert, 1987). Overlaps with later stages of AED and the 'expert' leader frame (section 2.2.5) by Leithwood, Begley and Cousins (1994) suggests a more empathetic approach (Carzolli, Gaa and Liberman, 1983). In section 4.5.4, I referred to the greater recognition of feelings within this stage. Recognising the complexity of interpersonal interaction might explain the drive behind HT/Ps beyond the Self-Aware stage increasingly seek informal insights (such as body language), which was not apparent in other stages.

In summary, these patterns in the information they seek can be linked to the patterns established in AED.

### *Planning and Problem Solving*

There were differences in the approach to planning and problem solving across the three stages:

- Involvement of the organisation. HT/Ps increasingly comprehended more of the organisation to be involved in the incident.
- The individuals involved. HT/Ps increasingly sought to involve a wider range of individuals and recognised the causal sequence of events that could extend beyond those immediately involved. Individuals from across the organisation were increasingly involved in either comprehending the situation or planning a response.



- How long HT/Ps would continue to work with the situation. HT/Ps increasingly recognised the potential for the situation to go beyond the initial incident.
- Moving from a private process of comprehending the situation to a more prominent role for others in comprehending what the situation involved.

In the Conscientious phase, HT/Ps sought to establish a rationale for the incident and used this rationale to plan a response. In planning this response, the HT/P sought to control either the process or the outcome through many forms: holding pre-meetings; writing scripts; rehearsing responses in the presence of other colleagues; and guiding others to a specific desired outcome. On the other hand, HT/Ps within the Individualist stage had a greater tolerance for allowing understanding to emerge. Crucially, these HT/Ps considered a wider set of individuals within their response and anticipated the need to monitor, or intervene, within the situation going into the future.

There are several links between these patterns and the AED literature. Overall, problem solving and managing these processes within teams have been recognised to become more sophisticated with each subsequent stage (Bushe and Gibbs, 1990; Harris and Kuhnert, 2008; Strang and Kuhnert, 2009). Furthermore, some specific observations from within my sample link to the limited patterns observed in leaders of specific AED stages. For example, the solution-orientated approach of those in the Self-Aware stage was noted by James, James and Potter (2017). This could explain why they limited their appreciation of the incident to the immediate presentation and sought to find an answer swiftly. Fisher and Torbert (1991) observed how individuals in the Conscientious stage will attempt to direct others to the answer which they had come up with. This is similar to how leaders in this study were observed to use others to validate their solutions (section 4.4.2). Indeed, the detail with which they could articulate the steps they took in situation management reflects Rooke and Tolbert's (2005) observation that individuals within this stage predominately focus on their actions and the steps they seek to take. Finally, those in the Individualist stage have been previously recognised for entertaining multiple options (James, James and Potter, 2017). As will be discussed in the following section, their increasing involvement of others is also a strong feature with Loevinger's AED model and research into individuals within later stages of AED.

Many of the underlying patterns can be associated with general ways of sense-making found within Loevinger's AED stage model. As individuals progress through the stages, they become more tolerant to ambiguity, which emerges fully in the Individualist stage of development (Manners and Durkin, 2001; Pfaffenberger, 2011; Pfaffenberger and Marko, 2011) and recognise increasing levels of complexity through each stage (Hy and Loevinger 1996; Manner and Durkin, 2001). This observation

might perhaps explain some of the approaches observed to problem solving. For example, it might explain why those in the Self-Aware stage focused specifically on the task without the explicit recognition that the event will likely carry on after an applied solution, which is a key feature of both complexity theory (Marion, 2008) and how wicked problems can continue beyond the initial incident (Rittel and Webber, 1973) inherent to wicked problems. Furthermore, it might explain why the Conscientious stage used planning and organisation throughout. By imposing a pattern upon the situation, and maintaining control through planning, it could be said to reduce the complexity allow to emerge and potential outcomes. When contrasted with Individualists full recognition of complexity (Loevinger, 1976), tolerance for ambiguity and conflict (Kegan, 1982; Pfaffenberger, 2011) and capacity to recognise different options (James, James and Potter, 2017), and their allowance more information, more individuals directly involved and a broader timeframe of the incident, there is the potential for general AED patterns to explain the problem-solving response taken by HT/Ps.

Another substantive feature of how individuals within the specific stages responded to incidents was in the role they gave to others. This too also showed considerable overlap to Loevinger's AED model.

### The Role of Others

Across the three stages of development, there were substantive differences in how a HT/P works with those around them. These two differences can be summarised as:

- The extent to which HT/Ps collaborate.
- How HT/Ps sought to develop those around them.

Compared to earlier stages, those that occupy later stages had an increasingly deeper role for others in reaching an understanding of the incident. Those within the Self-Aware stage would seek to make sense of the situation by themselves. This private sense-making would restrict interaction to relaying instruction and seeking further clarification/information. Those within the Self-Aware stage did not discuss the process of reaching a decision. Within the Conscientious stage, there are two important shifts: the HT/P would share the rationale behind their actions with those around them. In addition, the HT/P would seek out validation of their understanding/logic from a team of trusted individuals. In summary, before entering the Individualist stage, a HT/P constructed their understanding of a problem in private, with gradual increases in the involvement of others in validating their ideas.

The shifts that occur within the Individualist stage are substantial. Within this stage, a HT/P proactively involves those around them, working with many individuals from across the hierarchical chain to build up a shared understanding of the situation. They can articulate how each piece of information and each interaction has contributed to a joint perspective. As their understanding evolves and changes, they continue to talk with those around them. In summary, those around the HT/P play a deeper, more significant role in how the HT/P constructs their understanding of the incident as we move through the developmental stages.

The increasingly deeper role of others is a strong theme within AED literature. Within Loevinger's description of the Self-Aware stage, there is little about the involvement of others (Hy and Loevinger, 1996; Manners and Durkin, 2001). Instead, this stage is almost where the awareness of others begins to emerge – e.g., individuals are beginning to recognise general differences, starting to recognise how they differ to others (Westenberg, Blasi and Cohn, 1998). Finally, Cook-Greuter (1999) recognised that those earlier in development perceive themselves as independent from others, which might explain the minimal roles others play in their plans. This contrasts with Loevinger's Conscientious stage, there is a greater reference to others. Hy and Loevinger (1996) recognised that "*relationships are deeper*", p.18) and based on the need to communicate. They recognise the dependency they have with others (Cook-Greuter, 1999). Also, within the Conscientious stage exists a "*strong sense of responsibility*" (Hy and Loevinger, 1996, p.16) along with a need for control (Hy and Loevinger, 1996). The need to remain in control might explain why, despite holding deeper relationships with those around them, Conscientious individuals limit the involvement of others to a trusted group of advisors. Furthermore, they retain control in the sense-making process – they do engage others, but only to seek validation

The emergence of mutuality and inter-independence within HT/Ps at the Individualist stage is a critical factor within the Individualist stage descriptors provided by Loevinger. Mutuality is explicitly recognised as a core feature of interpersonal style within the Individualist stage (Hy and Loevinger, 1996; Manners and Durkin, 2000). It involves exchanges being equal interchange and the potential for individuals to other in recognition that they are connected (section 4.5.2) and it is a critical part of an Individualists' recognition of interdependence with those around them (Hauser, 1993; Cook-Greuter 1999). In my observations, it was therefore not surprising that HT/Ps within the Individualist stage gave so much weight to the thoughts and perspectives of others. The HT/Ps shared and worked with those around them to build a mutually held picture of the incident. It was through holding individuals in a mutual frame that facilitated this attempt in co-construction. Without

appreciating the perspective of others as equal to their own, others would not have played as predominant a role.

There is a link between the theme of development and the Individualist stage of AED. HT/Ps would look at the complex critical incident as a development opportunity for their staff. This observation directly relates to theory relating to the Individualist stage of AED. A prominent feature of the Individualist AED stage is the respect for others' individuality (Kegan, 1982; Drago-Severson, 2004), and facilitating an interest in the development of others (Joiner and Josephs, 2007). It is only later in the Individualist stage that refers specifically to an interest in developing others (Hy and Loevinger, 1996). Prior to this stage, those within the Conscientious stage feel a "*strong sense of responsibility to others*" (Loevinger and Wessler, 1970, p. 79), and those in the Self-Aware stage consider how to be helpful to others. Therefore, the focus on developing others observed in HT/Ps within the Individualist stage can be linked directly to the descriptions of AED.

In summarising this section, the patterns found across the case studies in relation to how HT/Ps conceptualise the role of others can be considered reflective of Loevinger's AED theory.

### The Role of Feelings

Table 6 demonstrates the substantial shifts across in how individuals interacted with their feelings and those of others that arose during the incident. In the Self-Aware stage, HT/Ps sought to express how the immediate situation had made them feel. However, HT/Ps did not engage with how feelings might be at play in driving other's comprehension of the situation and their response. Within the Conscientious stage, HT/Ps acknowledged that the situation had strong feelings associated with it and that these could influence decision-making. However, their response was to minimise the role feelings played within the incident (i.e., taking a walk, sleeping on the decision overnight). There was a belief that feelings inhibited the decision-making process. In the Individualist stage, feelings were embraced. HT/Ps proactively sought out the feelings generated from the incident and considered how people felt within their understanding and response. Therefore, feelings (and therefore the wider concept of affect), was increasingly recognised as a central driver within the incident.

The patterns found within HT/Ps across the AED stages can be identified within the AED literature. There is a general recognition in that AED stage development can be correlated with: an increased awareness of emotion (Carlozzi, Gaa and Liberman, 1983); the extent to which individuals identify feelings (Labouvie-Vief, De Voe and Bulka, 1989; Lane et al., 1990); and the extent to which individuals discuss and communicate their feelings (Lanning et al. 2018). This explains the general

pattern within the data, that discussions on feelings became increasingly central to how HT/Ps worked within the incident.

Within the stages themselves, there are several insights which underpin how HT/Ps in different stages interacted with affect. Hy and Loevinger (1996) describe how individuals within the Self-Aware stage feel comfortable discussing their feelings, without describing much more about how individuals within this stage handle the feelings of others. This observation might explain why HT/Ps did not recognise feelings as integral to their understanding of the incident and why they were limited to expressing the feelings within themselves and their staff. At the Conscientious stage, there is a general recognition of a growing awareness of emotion, along with a greater interest in unseen psychological factors compared to the stage prior (Loevinger and Wessler, 1970; Loevinger, 1976). Those within this stage can have conscious pre-occupations on how feelings can differ in others (Hy and Loevinger, 1996). However, their attempt to control the expression of feelings might fit with the broader theme of complexity management (section 4.3.6). Within Loevinger's Individualist stage, there is far more explicit reference to feelings. There is a "*greater complexity in conception of human interaction*" (Loevinger and Wessler, 1970, p.90), which includes emotion. Kegan (1982) acknowledged that individuals within this stage recognise that events can produce conflicting and contrasting emotion. This might explain why the HT/Ps placed greater emphasis on the expression of feeling, inquiring about feelings and recognising their central role in incidents.

In summary, the general patterns across AED stages, as well as specific insights from Loevinger's AED model, support the patterns found in how HT/Ps in different AED stages interact with both feelings and affect more broadly.

### Perception of Others

There are substantive differences between how HT/Ps in different stages of AED are experienced by those around them. The summary given in Table 6 shows that HT/Ps within the Self-Aware stage were recognised for a hands-on approach to managing the organisation and for handling the situation in a quick and decisive manner. Individuals described HT/Ps in the Conscientious stage as a list of desirable qualities/traits. Some of these traits included being empathetic, a good listener and a hard worker. Responses from those at the Individualist stage of AED indicated that HT/Ps were more likely to have insights into the complex tasks that others do not see. Furthermore, while those around the HT/P within the Conscientious stage would describe their HT/Ps as empathetic or good

listeners, those around Individualist HT/Ps described how they had made them 'feel' listened to, heard or understood.

Loevinger's model of AED focuses upon the individual in question and how they interact with their environment. Consequently, there are no direct references that can be made between the AED literature and why others might perceive individuals of different AED stages in substantively different ways. However, I would argue that there is a potential indirect link between the perceptions of others and the Individualist AED stage. HT/Ps in the Individualist stage granted those around them with a deeper and more significant role within the understanding and responding to the incident: they would share their thinking process and seek to co-construct to build a shared understanding with those around them. As such, by involving those more closely within the sense-making process, the HT/P could demonstrate that their voice has had an impact on the HT/P's understanding and subsequent actions. I would argue it is therefore unsurprising that those around Individualist HT/Ps report a deeper sense of resonance with their HT/Ps. Furthermore, being perceived as an individual who can see far greater complexity in a situation than others is likely to have emerged because of how HT/Ps work with others. As noted in section 5.2.1, those within the Individualist stage acquired a wide range of insights from a broad coalition of individuals, compared to someone working with a trusted set of advisors (Conscientious) or on their own (Self-Aware). This would have facilitated insights into a wider range of information, facilitating a greater comprehension of the complexity within the incident (Section 4.5.6). Hence, both these perceptions of those within the Individualist stage of AED could have emerged also from the working practices of these HT/Ps, which of themselves can be attributed to AED.

### Comprehending Complexity

In exploring complexity, I am referring to how HT/P within different AED stages comprehended and recognised features of complexity within the incident and their environment. Observations were made across three domains: causality, scoping the problem and recognition of complexity within the wider organisation.

HT/Ps description of causality became less linear with each subsequent stage. The Self-Aware stage focused on a single cause that was identified by the HT/P. In the Conscientious stage, HT/Ps would show greater interest in the reasons behind the incident. They would ask those around them for the reasons why this incident occurred. In their private sense-making process, they would attempt to establish patterns. In the Individualist stage, this interest in causality extended to the cause and

impact within the school. The HT/P recognised the situation as linked to what had come before, what will come next and considered the involvement and impact on a wider range of individuals.

In reference to scope, the problem was recognised as less linear and more unpredictable as we move through the stages. HT/Ps in the Self-Aware stage maintain a simple, linear perspective of the situation. Events were described as a causal chain, and the impact of the intervention will directly remedy the event. Those in the Conscientious stage started to consider a wider range of variables. However, there were then attempts to control their exposure to the degree of complexity they could perceive; their focus would become increasingly narrow as they worked through their understanding of the incident, to develop a logical framework for what happened. In the Individualist stage, HT/Ps looked to work beyond the temporal and physical boundaries of the initial presentation in order to understand what happened and what to do next. They recognised the unpredictability of the situation. Furthermore, by building a situation piece by piece with the other people, continue to view the problem beyond the initial incident, which allowed for different ideas to emerge throughout the incident. New information would then be processed shaping the HT/P's understanding of the incident and the resulting plan. Finally, there is an increased recognition of the organisation with each subsequent stage development. Individuals in later stages made greater reference to involving or discussing the impact upon others not immediately involved within the incident.

The patterns identified across these three stages are similar to the patterns in Loevinger's AED Model. The overall sense of complexity is a defining feature of vertical development (Hy and Loevinger, 1996; Kegan, 1982) and is clearly observable across the three case studies: concepts of the problem become broader, there is a greater reference to a wider set of variables and greater recognition that there are consequences of the event beyond the immediate problem. Crucially, this emerges in the degree to which complexity is embraced. In the Conscientious stage, a broader perspective of the incident and organisation as a whole is recognised. This point is indicated in Loevinger's (1976; 1987) recognition that of the emergence of conceptual complexity occurs within this stage. However, there are several behaviours which limit and control their exposure to complexity. Examples of these behaviours include planning; emotional containment; and the eventual focus on a key variable in order to find a solution. These behaviours attempt to simplify the extent to which complexity can feature within their comprehension of the incident. This finding echoes Van-Velsor and Drath (2004) observation that those in stages prior the Individualist stage can find complexity overwhelming. In comparison, the Individualist stage begins to embrace ambiguity

and seeks to work with this wider perspective rather than control or simplify. These general patterns fit within Loevinger's view that individuals come to conceptualise the environment as increasingly complex and seek such environments in later stages of AED (Hy and Loevinger, 1996; Rooke and Torbert, 2005; Pfaffenberger, 2011).

There are also references to the more concrete observations within each stage and the individual stage descriptors. Results from HT/Ps within the Self-Aware stage exposed several themes that were evident in Hy and Loevinger's (1996) stage description. Loevinger describes how those in this stage prioritise "*what is right for the situation*" (p. 5) and the "*need to achieve a goal*" (p.5). In my findings, it was clear that HT/Ps in this stage were driven by finding a solution to the incident. Also, Loevinger (1976) stated that, while multiple possibilities could be recognised, it was limited to being recognised in general terms. This observation was seen in the Self-Aware sample, as HT/Ps did not recognise the multiple possibilities in specific circumstances of the incident.

There were also concrete references to these findings within the Conscientious stage. In Hy and Loevinger's (1996) description of the Conscientious stage, multiplicity and causality stand out in underpinning how those within this stage conceptualised the complexity within tasks. Concerning multiplicity, Hy and Loevinger (1996) note that those within the Conscientious stage handle more possibilities and can see both sides of a situation and are interested in establishing causal patterns. This finding possibly explains why Conscientious HT/Ps would seek out potential causes from those around them and how they prioritised establishing a logical rationale behind why the incident occurred.

Finally, specific references within the descriptions of HT/Ps within the Individualist stage align to findings of the AED model. Hy and Loevinger established that those within the individualist stage tend to work with a "*broad view of life*" (1996, p.21). Those in the Individualist stage are recognised to begin developing a tolerance for ambiguity. (Bartunek, Gordon and Weathersby, 1983; Vincent, Ward and Denson, 2015; James, James and Potter, 2017). Furthermore, an interest in the 'longer-term' is also a feature of individualist AED. It was clear how HT/Ps enacted this broader world view in how HT/Ps seek to understand what happened before the situation and what could potentially happen afterwards. A greater interest in psychological causality, noted throughout the AED stages (Hy and Loevinger, 1996) could explain how the HT/P would seek information around the well-being/context of the individual.



## Summary

In this section, I have demonstrated the substantive link between the HT/Ps' respective stage of adult ego development, their practice and how they relate to those around them. The overarching themes to have emerged from an analysis of the way HT/Ps interacted with wider organizational complexity, the handling of critical incident, the role they gave to on others and the feelings of others are resonant of their stage of AED, as outlined by Loevinger and others, in respect to individual stage descriptors and the overall trajectory of development.

### *5.2.3 Reviewing Question 3*

Question 3 was: Is being in the post-conscientious stage of AED advantageous to HT/Ps in their leadership work in their schools?

Based on the patterns across the sampled HT/Ps, I argue that the later stages of AED could offer advantages in leading educational organisations. This argument is based on four key observations:

1. Those in the Individualist stage of AED comprehend and acted with a greater recognition of the 'Wickedness' within a critical incident.
2. Those in the Individualist stage of AED facilitated collaborative, mutual and developmental relationships with those around them.
3. Those in the Individualist stage of AED recognised and worked with the feelings that can emerge during an incident.
4. Those within the Individualist stage of AED employed strategies that would help them to recognise a greater degree of conceptual complexity within the incident.

#### **HT/Ps in Later Stages Worked with Increasing Recognition of the Wickedness of a Problem**

Part of a school leaders' role is ensuring the proper functioning of their organisation. This point is exemplified by conceptualising educational leadership as taking responsibility for their organisations (Connolly, James and Fertig, 2017) and in studies of the role of HT/Ps. I argued that several of their responsibilities within educational organisations could be considered wicked problems. As a complex organisation, wicked problems will be more prevalent as they can be considered an extension of complexity (Waddock et al., 2015; Peters, 2017). Furthermore, others have identified school leaders face 'swampy' problems (Leithwood, Begley and Cousins, 1994), which I showed in section 2.2.5, has substantive overlap with the wicked problem concept. In section 2.2.5 I outlined how many of the tasks identified by authors such as Earley and Bubb (2013) appear to overlap with wicked problems

and how others such as Anderson (2017) have exposed specific wicked problems within schools. Therefore, how HT/Ps comprehend, and respond to, wicked problems within their organisation is a fundamental part of their leadership role.

HT/Ps within each AED stage had fundamentally different ways of working with these wicked problems. It would appear that progress through the stages itself represented some advantages. Leaders increasingly sought out a broader range of information and individuals to involve in their understanding of the problem and made greater use of others in developing an understanding of the situation. However, it was particularly in the Individualist stage where there was a step-change. It was this stage where HT/Ps invited others to play a prominent role in co-constructing their understanding. They were comfortable understanding of the incident to emerge over time, as opposed to imposing a model or pre-determined answer; and were the only ones to actively seek an understanding of what came before and to consider the context beyond the immediate incident.

One key advantage is the way which HT/Ps within the Individualist stage approach incidents that were wicked problems align closely with the features of a wicked problem. I have outlined this alignment in Table 11.

Features of Swampy Problem (Leithwood, Begley and Cousins 1994)	Features of Wicked Problem (Rittel and Webber 1973)	Summary of Individualist stage response to incidents that were wicked problems.
Only a vague understanding of the situation is possible.	Wicked problems are hard to define	<ul style="list-style-type: none"> <li>• Recognition of the need for a wide perspective</li> <li>• Recognition of how the problem is entwined within complex elements</li> <li>• Recognition of broader organisation within the incident, i.e., 'the whole picture'.</li> <li>• Attempts to understand incidents history and potential future beyond the immediate incident .e. no stopping rule, the problem as a consequence of others.</li> <li>• Look for 'grey' information that could make the situation less vague – insights, opinions etc.</li> <li>• Recognition that emergence could occur, i.e., no stopping rule</li> </ul>
Little relevant knowledge	Wicked problems have no stopping rule	
	The problem might be a consequence of another problem	
	Wicked problems have multiple explanations	

<p>The problem is challenging to solve.</p> <p>The response to the problem requires fine-tuning.</p> <p>There is no clear way of knowing what would be better.</p>	Solutions are good or bad – they are not right or wrong	<ul style="list-style-type: none"> <li>• Collaborated to build solution – did not impose a solution but would look to build one through collaboration and dialogue. Therefore, a recognition that solution is too complex for an individual to operate on their own.</li> <li>• Recognition of the need to understand beyond incident.</li> <li>• Recognition that the incident will have consequences that need to be monitored, i.e., there is no test, there are consequences and not necessarily right or wrong.</li> <li>• Provide support beyond the immediate situation – the need for fine-tuning with no clear solution.</li> </ul>
	There is no test for solutions	
	All attempts to solve the problem might have consequences which are irreversible and not forgettable	
	The problem is essentially unique.	
<p>No procedure for dealing with the situation.</p> <p>Little experience in dealing with at least some of the problem.</p> <p>Little relevant knowledge.</p>	There is no clear solution.	<ul style="list-style-type: none"> <li>• Used policy as a guide, not as a firm rule</li> <li>• Recognised unique nature of the problem – look to understand the history of the incident inductively; build an understanding and solution in co-construction with those around them, as opposed to a centrally imposed solution.</li> <li>• Recognition of people as central to the incident. Can resonate deeply with those around them</li> </ul>

*Table 11 Summary Comparing Wicked Problems, Swampy Problems and Individualist Sense-Making*

By recognising a problem as wicked, as opposed to tame, responses can be more appropriately designed to fit the problem (Leithwood, Begley and Cousins, 1994). Treating a wicked problem as a tame problem might not lead to a solution that is reflective of the issue at hand. It can compromise how individual take responsibility for their organisations, and thus the leadership within it, leading to subsequent problematic management issues (Grint, 2010; Hancock, 2010; Waddock et al., 2015)

Furthermore, several of the features of expert leaders identified by Leithwood, Begley and Cousins (1994), hypothesized as fitting for the swampy problem, are synonymous with the practices we found of those in the Individualist stage. These include:

- Collecting new information.
- Taking other people's interpretations into account.
- Co-constructing with the team and high levels of consultation.

- Detailed thinking process.

Critically, Leithwood, Begley and Cousins (1994) identified these expert leaders as more likely to have an impact on a range of outcomes. These outcomes include student achievement attendance, teacher job satisfaction, and the implementation of teaching practices. These practices could, therefore, be considered advantageous to school leadership, and given the considerable overlap between these concepts, the Individualist stage of AED could be recognised as facilitating leadership behaviours which could advance relevant outcomes in educational organisations.

Several of the ways in which HT/Ps within the Individualist AED stage comprehend and respond to wicked problems have been associated with other organisational and team outcomes. Merrion, Fisher and Torbert (1987) and Fisher and Torbert (1991) identified, in that those in later stages were more likely to involve others within their approach to the task. They report that this can increase the chances of a sustainable outcome. Others that focused on establishing leader efficacy observed that this developmental stage was linked to their perceived ability to recognise their context (Rooke and Torbert, 2005), improve team outcomes (Harris and Kuhnert, 2008; Strang and Kuhnert, 2009) the ability to build a common understanding (Bushe and Gibbs, 1990) and associated with greater conative ability (Heaney, 2020). James and Potter (2017) also observed that those who had worked with individuals in the Individualist stage recognised that such leaders had a broader appreciation of the complexity and a growing ability to consider different options.

In summary, later stages of AED appears to offer some advantages to handling the wicked problems within educational organisations. Those within the Individualist stage of AED have a way of working that embraces more features of the wicked problem. This recognition, and ways of working with others, can lead to a more relevant response and can be aligned to a range of favourable outcomes. However, as discussed in section 2.3, there are few examples that have qualitatively and robustly described the differences in working approaches according to AED stage. Therefore, this analysis needs further empirical investigation.

### **HT/Ps in the Individualist Stage of Adult Ego Development Facilitated Mutually Collaborative and Developmental Relationships with Those Around Them**

The relationships that HT/Ps share with their staff is a fundamental part of leadership. Influence is a defining feature of leadership (Yukl, 2002; Connolly, James and Fertig, 2017, Northouse, 2016) and the relationships that leaders form with their staff will play a direct and indirect effect on the influence they exert within their organisations (Huber, 2004; Heck and Hallinger, 2014; Day, Gu and

Sammons, 2016). In section 2.2.5, I scrutinised a wide range of different educational leadership theories to determine the underlying assumptions behind what form such a relationship should take. I found that, across these different models, there was a shared expectation for HT/Ps to hold mutually collaborative and developmental relationships with their staff. This observation was evident in models that focused explicitly prioritised collaboration within leadership, such as collaborative leadership (Woods and Roberts, 2018) and professional learning communities (Vescio, Ross and Adams, 2008). Also, it was an implicit assumption with other popular models, such as instructional leadership (Printy, Marks and Bowers., 2009; Hallinger, 2010), distributed leadership (Harris, 2003; 2008) and transformational leadership (Day, Gu and Sammons, 2016). From this critical analysis, it is a reasonable hypothesis that relationships that are mutually collaborative and developmental could provide an advantage to an individual seeking to influence their organisation and the individuals within them, as well a critical ingredient to enacting a range of leadership theories into practice.

In this study, I have shown the HT/Ps in the Individualist stage of AED formed these mutually collaborative and developmental relationships with those around them. In collaborating with their staff, HT/Ps would co-construct their understanding with those around them. They would engage others in a dialogic process that, before this stage, was either seeking others to validate or share their private sense-making process. This co-construction approach, along with how they would seek out a range of individuals regardless of position in the hierarchy, demonstrated how they would hold those around them in mutual regard. Finally, concerning the developmental aspect, those around the HT/Ps reported how they would focus on their professional and personal development. Thus, it was the Individualist stage that embraced the collaborative, deep and mutual relationships held in esteem by many theories of educational leadership.

This specific advantage has been recognised in previous research exploring leaders' stage of AED. I replicated findings that development toward the Individualist stage were more likely to associated with building a common understanding and deeper collaboration with those around them (Bushe and Gibbs, 1990; Bartone et al., 2007), as well as making greater use of others their perspectives to fully understand situations (Bartunek, Gordon, & Weathersby, 1983; Fisher and Torbert, 1991). Mutuality (Cook -Greuter, 2000; McCauley et al., 2006), the recognition of our inter-dependence on others (Hauser, 1993; Rooke and Tolbert, 2005) are also hallmarks of the Individualist stage. Furthermore, this research provides empirical evidence for the limited claims that leaders within

later AED stages are more likely to take a greater interest in the development of others (Kegan, 1982; Drago-Severson, 2004; Joiner and Josephs, 2007).

In summary, later stages of ego development offer advantages to working with others in educational organisations. The mutual, collaborative and developmental relationships that is given such a prominent role across multiple theories of educational leadership, emerge most clearly within HT/Ps working within the Individualist stage of AED. Therefore, given the purpose of models is to promote and guide effective and sound leadership practice within organisations, I would argue that it is possible to suggest that the way those in the Individualist stage interact with those around them might offer an advantage to how they lead and manage their organisations. However, as with other themes in this thesis, the research that explicitly explores the nature of the relationships formed by leaders in specific AED stages is limited. (section 2.3). Hence, further exploration is required to establish these potential advantages further.

### **HT/Ps in the Individualist Stage of Adult Ego Development Recognised Affect as Central to Incidents within Educational Organisations**

Affect is a crucial factor in the leadership of educational organisations. The importance of how leaders process and handle feelings has been a well-documented area of leadership discourse (Harms and Crede, 2010; Boyatzis and McKee, 2006; Mayer, Salovey and Caruso, 2000). This has been discussed more limitedly within educational leadership. According to James, Crawford and Oplatka (2019) and Crawford (2009) affect is an especially important aspect of educational organisations. In section 2.2.7, I outlined how HT/Ps experience specific affective demands within their role and in their setting (Kelchtermans, Piot and Ballet, 2011; Crawford, 2009; Beatty, 2000). Critically, how HT/Ps respond to the feelings of others can be a sizeable determinant on the job satisfaction and efficacy of their colleagues (Skaalvik and Skaalvik, 2011; Lassila et al., 2017). Therefore, how HT/Ps comprehend and respond to affect is a critical aspect of how leaders take responsibility for their organisations and the influence they have over others and the wider organisation.

The Individualist stage appears to offer a unique set of advantages to school leaders in how they handle affect within their organisations. In section 5.2.1, I described how it was only within the Individualist stage where feelings were discussed openly. Empathy was a key observation: HT/Ps sought to understand the feelings of others. Furthermore, they acknowledge that the recognition that the feelings of those mattered in influencing the interpretation and subsequent actions. Thus, HT/Ps within the Individualist AED stage differ substantially from those in other stages in

identifying affect as part of the incident and relevant for how they handled others within their organisation. Furthermore, those around the HT/P experienced those within this stage as empathetic.

Others have recognised this finding in the field of adult development. Several have observed that those within the Individualist ego development stage are more likely to refer to affect (Lanning et al., 2018) and other studies have shown a correlation between emotional awareness and AED stage (Carlozzi, Gaa and Liberman, 1983; Mayer and Salovey, 1995; Labouvie-Vief, De Voe and Bulka, 1989; Lane, 1990). Thus, the finding in this study of an association between AED and affect has confirmed and supports previous findings.

However, there has been little that has directly explored AED, affect and leadership practice together. There has been some reference to greater emotional maturity and awareness in leaders of later stage AED (Joiner and Josephs, 2007; Brown, 2012; Reams, 2017). However, they have not qualitatively documented how greater emotional maturity manifests within leadership behaviour, nor explored how this experienced by those around them. Thus, while the link between affect and AED has been considered prior to this thesis, the specific ways in which those within the individualist stage interact with affect is a new explicit contribution, built on the common ground with previous studies of AED and affect.

### **HT/Ps in Later AED Stages Comprehended Greater Degrees of Complexity**

Appreciating the complexity of the organisation is an important facet of educational leadership. HT/Ps have substantive responsibilities within and outside their organisation (DfE, 2015; 2017). How HT/Ps comprehend and respond to these responsibilities will influence the organisation and those within it (Connolly, James and Fertig, 2017). HT/Ps will have to comprehend and interact with these responsibilities in the face of significant organisational complexity (Hawkins and James, 2018; Morrison, 2002; 2010). In section 2.2.4, I outlined how the features of complex adaptive systems are evident within educational organisations and within some of the challenges that schools need to face - stretching from how they interact with other schools and how they develop their curriculum (Anderson, 2017; Woods and Roberts, 2018). Thus, comprehending and responding to their responsibilities could be affected by the extent to which individuals understand the complexity inherent within their organisations.

In this study, I have reported that there was an increased recognition of organisational complexity in each subsequent stage. However, it is HT/Ps within the Individualist stage where key complexity

concepts emerged in how HT/Ps responded to critical incidents. These features are consonant with the original AED descriptors outlined with AED theory (Loevinger, 1966; Loevinger and Wessler, 1970; Loevinger, 1976; Hy and Loevinger, 1996). This finding is summarised in table 12:

Feature of Complexity	Source	Feature of Individualist Stage Responses
Emergence	Hawkins and James (2018); Morrison (2010)	Would allow for emergence by slowly developing their understanding of the situation
Relatively unpredictability within events	Stacey (2000) Morrison (2002)	Direct reference to being unaware of how the situation could evolve  Would seek to monitor the situation  Would actively seek more information and could tolerate ambiguity.  Rules only provided guidance.
Interdependence and recognition of interaction within a system	Holland (1992)	Explained situations in a way that recognised how a wide set of variables, some seemingly unconnected to the initial stimuli, and how they could be inter-related and connected.  Maintained a wide view on the situation – would not seek to diagnose the situation or limit the number of variables involved.  Viewed others as mutual to them – recognition of inter-dependence and inter-connectivity between themselves and others.
Systems have a history, which will shape the organisation going forward	Hawkins and James (2018); Palmberg (2009)	Sought to understand the ‘whole picture’ and would enquire about prior incidents/previous behaviours.  Would seek to monitor the incident after a solution had been applied.

*Table 12 Summary of Overlap Between Features of Complexity Theory and Patterns Found Within Individualist HT/Ps*

Others have recognised the capacity of those within the Individualist stage and beyond in recognising general concepts of complexity. Lanning et al. (2018) demonstrated that later AED stages are related to how individuals will discuss a broader range of perspectives and their responses becoming increasingly complex. The capacity to see complex patterns within organisations is generally considered a marker of later stages of AED (McAdams, Ruetzel and Foley, 1986) which



could support those in the Individualist stage in recognising different options (James, James and Potter, 2017). Others have reported those in the individualist stage expressing greater comfort with ambiguity and paradox (Pfaffenberger and Marko, 2011; Vincent and Denson, 2015) as well as greater interest in inter-connectivity (McCauley et al. 2006). Whilst some of these more general themes can be said to have been observed prior to this thesis, this thesis is the first attempt to explore complexity theory alongside AED and produced descriptive, nuanced insights that were not observed previously.

Taking this in account, it would be a fair conclusion that AED stage can influence how, and to what extent, HT/Ps could embrace the complexity inherent within their organisation. This could lead to several advantages for the individual HT/Ps coping with such circumstances, how they are perceived by those around them and their potential capacity for comprehending and responding appropriately to their organisations. Some of this evidence originates from this thesis: those around HT/Ps within the Individualist stage described them as “*magical*” (section 4.5.5), referring to their capacity to resonate deeply with others. Furthermore, those around the HT/P described how their HT/P could formulate insights into situation that others simply could not see (section 4.5.5). Research outside this thesis also suggests that driving change through an organisation or system is associated with those in stages beyond the Conscientious stage (Rooke and Torbert, 2005; McCauley et al., 2006) as well as greater general effectiveness in leading change (Harris and Kuhnert, 2008; Strang and Kuhnert, 2009). However, the relevance of complexity perception on organisation outcomes is poorly researched and requires further investigation.

## Summary

In summary, the Individualist stage of AED can be considered to have several advantages for the leadership of educational organisations. I have discussed how later stages of AED increasingly recognise the features of wicked problems inherent to the responsibilities that they face, the implications this has on those around them and, potentially, their effectiveness. Those specifically within the Individualist stage of AED formed mutually collaborative, developmental relationships and fully recognised a greater degree of affect, namely the feelings of others. I have argued that, considering the literature of educational leadership literature, these differences could prove to be important in how they influence their organisations. Finally, I have shown how recognising increasing degrees of complexity could influence how they are perceived by those around them and, potentially, their capacity to instigate change in their organisation.

With all these observations, I have made the caveat that these themes are under-developed within the adult development and leadership literature. I return to this in section 5.4.1, where I discuss how these case studies provide original and more detailed data to the field.

### *5.2.4 Summary of Section*

I have demonstrated that HT/Ps with different stages exhibit substantive differences in how they comprehend and respond to organisational complexity and wicked organisational incidents. I have also shown the substantive differences within each AED stage relating to the role that HT/Ps they assign to others and the extent to which they comprehend and respond to affect. There are also substantive differences in how those around them interact with their HT/P. I have outlined that the patterns resonant with Jane Loevinger's AED stages, both about the overarching patterns across the stages and within the stages themselves. I have also shown how some of these patterns have replicated previous attempts exploring AED in general leadership practice. I have also discussed how later stages of AED offers specific advantages to HT/Ps in the leadership of educational organisations.

In the next section, I will discuss the limitations of this study. These limitations will provide the platform by which to analyse the unique contributions of these results to research and practice.

## **5.3 Limitations of Study**

In this section, I will discuss the limitations of this study. The limitations I have identified are:

- Sample size.
- Failing to find individuals beyond the Individualist stage.
- Establishing advantages.
- The WUSCT as an assessment tool.

### *5.3.1 Sample Size*

The sample within this study is limited to 20 individuals. This sample size is relatively small in comparison to other studies within the field. Most studies that looked at the AED stage and leader effectiveness via 360 feedback have sample sizes that range from 21 (Bartone et al., 2007) to 74 (Harris and Kuhnert, 2008). Studies that looked at task behaviour such as Merron, Fisher and Torbert (1987) used at least 49 participants. Larger scales studies such as Joiner and Josephs (2007) worked with 604 managers.

Small sample sizes can limit the extrapolation of the findings beyond the sample because of their effect on the ability to study individual differences and to appreciate context. Small samples offer limited opportunity to study the variance of individual differences (AED stage, chronological age, years' experience, training) and contextual variables (School type, Ofsted grading, location, stage) that exist within a given population (Cohen, Manion and Morrison, 2007; Bryman, 2016). A larger sample size would increase the variance of contexts that the behaviour was observed in and permit more observations of each theme (Robson, 2002). Consequently, if this study had a larger sample size, greater confidence in the links between a HT/Ps response and their AED stage would be possible, as each theme would have been observed across more individuals and a broader range of contexts. Any claims that such observation is a common feature amongst HT/Ps within a given stage of AED, and the extent to which any finding can be confidently associated with AED and other factors, should therefore be critically considered.

In critically evaluating the impact of small sample size, there are several factors that can be said to limit the effect of small sample size on the results' credibility. First, I outlined that I sought to only establish the potential for AED in understanding a HT/P's practice, recognising that specific details would require further exploration in future studies. With this focus in mind, the following factors helped to robustly establish this potential within this sample size: the intensity with which each theme was established; the variety within the sample; similarity to theory and prior results; and how I was unaware to an individual's stage of AED throughout the process of establishing themes within their practice.

*Each identified theme was studied intensively.* Extensive triangulation techniques were employed to ensure the credibility and dependability of each theme. Themes describing a HT/Ps practice within AED stages had to be consistent across:

- two different tasks (one task that was recalled, and one task that was hypothetical).
- three individuals (the HT/P, along with their Chair of governors and a Deputy HT/P).

Through this approach, the common features of an individual's sense-making could be identified and cross-referenced with six separate data points, incorporating historical and predicted patterns in behaviour. Each potential theme was further corroborated across individuals of the same stage of AED to ensure consistency across all individuals within the group.

These approaches limited the effect of small sample size. In small samples individual patterns can have a greater impact on the collective result, which can be harder to establish confirmability. However, due to the extensive cross-referencing procedure within the data analysis, these results can be said to consistently demonstrate that substantive differences were apparent and therefore enhance conformability and dependability.

*Variety within the sample.* I recruited the sample from a broad mixture of different demographic variables. As indicated in Table 5, each group of individuals in any given AED stage contained a mixture of gender, geographical location, school type and chronological age. This variety was important. As outlined in the previous paragraph, all individuals within each AED group had to express the same theme within their answers for it to be considered for inclusion. One of the arguments against small sample sizes is the restriction in exploring constructs across demographics, hence limiting the conformability that the results might be attributable to a given psychological construct (Mertens, 2019). With such diversity within each AED group, we can have greater confidence that these findings were primarily related to the AED and not that of another contextual variable.

*Similarity to theory and prior results.* Being able to demonstrate the findings from underlying theory enhances two of Lincoln and Guba (1985) evaluative criteria for qualitative work. The first of these criteria is credibility. Credibility refers to the extent to which the findings can be considered true (Lincoln and Guba, 1985). In this scenario, truth can be taken to consider the extent to which underlying theory (AED) can be attributed as a probable source of the individuals' practice. As discussed in section 5.2.2, the key patterns observed within and across HT/Ps within the three AED stages resonated with the themes observed by Loevinger (1976) and others (Hy and Loevinger, 1996; Manners and Durkin, 2000). Furthermore, dependability has been demonstrated. Dependability is the extent to which findings are consistent (Lincoln and Guba, 1985). In section 5.2.3, several of the key advantages observed in individuals in the later AED stages has also been observed in other leadership studies. Recognising that these themes resonate with what has been previously identified in leaders within the same stage thus demonstrates its potential for replicability.

*No knowledge of an individual's stage of AED during analysis of their data.* Ensuring that I did not know an individual's stage of AED during the data analysis process has aided the confirmability of the findings. Awareness of the participant's stage of AED before processing data could have induced confirmation bias. In this scenario, I might have sought out information that, based on Loevinger's initial stage conceptions, would align to pre-determined AED stage. Thus, information about the

participants stage of AED could have skewed my judgement, compromised impartiality and interfered with the generation of a theme. However, this was prevented by masking an individual's AED stage until I had drawn key themes from their data. Through this step, I can be more confident that the themes that emerged are confirmable in so much that they can be considered truthful reflections of their underlying stage of AED and not my interpretation or bias.

In summary, the sample size is limited to the smaller end of research in this field. However, I made significant efforts to cross-check each theme across a range of tasks and individuals. These individuals themselves came from a diverse demographic. Furthermore, these results resonated with the underpinning theory of these stages and the application of these stages to leaders from previous research. I also took steps to minimise bias. Therefore, this study has demonstrated the potential of AED theory, which provide a good basis for a larger scale study exploring the transferability of the specific claims within this thesis.

### *5.3.2 Failing to Find Individuals Beyond the Individualist Stage*

In this study, I failed to recruit any individuals within the Autonomous Stage of AED. As outlined in section 2.1, there are nine stages within Loevinger's AED theory. After the Individualist stage, there are the Autonomous and Integrated stages. The Integrated stage is considered a largely theoretical stage due to the lack of individuals identified during the cyclical development of the test (Hy and Loevinger, 1996). On the other hand, the Autonomous stage is observable within some individuals. I will discuss the potential impact of failing to find individuals within the Autonomous stage, and the steps I took to mitigate this failing.

Despite significant additional efforts, I could not source any individuals within the Autonomous stage of AED. These steps are outlined in section 3.5.4. By not identifying anyone within the last potential AED stage, this study can only offer limited support to the claims that later stages of AED can be associated with advantages to leadership practice. A long-held view within adult development and leadership literature, such as Kegan and Lahey (2009), Laske et al. (2003) and Reams (2017) is that there are significant advantages to later stages in how they lead teams and organisations. However, because I did not identify anyone within this stage, I cannot offer any reliable attributions concerning HT/Ps within this Autonomous stage. As I was unable to identify individuals within the final part of the adult development trajectory, I am unable to provide complete support for the claims that each subsequent stage movement is associated with increased leadership capacities.

In a study of this scale, it was always going to be a challenge to recruit individuals within the Autonomous stage due to their rarity within the general population. Cook-Greuter (1999) and Cook-Greuter (2004) remarked that 85% of the population never reaches post-Individualist stages. Lanning et al. (2018) confirmed this observation in more recent analysis. Rooke and Torbert (2005) supported this claim, albeit with action logics, whereby individuals developing beyond the Individualist stage were rare. Therefore, in such a small sample, it would have been difficult to have identified this rare stage of development.

Despite this limitation, I believe that my findings can offer partial support to the claim that later stages of sense-making provide advantages to leading in complex settings. Firstly, my results are supportive of the claims with adult development literature. I have outlined in section 5.2.2 how the findings within each stage, as well as how the patterns developed across the stages, can be considered representative of AED theory. In the same section, I observed how the results from this study are broadly in line with the general patterns found within leadership literature. That is, practices of those within the Individualist stage were more attuned to the complexity within organisations and the wicked problems that they faced. I would argue this provides partial support for the general hypothesis of other theorists, such as Rooke and Torbert (2005), Joiner (2011) and Reams (2017) that later stages can be advantageous to the leadership of organisations. Thus, I am limited to offering partial support for the general concept that later stages offer advantages to those leading in complex organisations.

### *5.3.3 Conceptualising the Strengths of AED to Leadership Practice*

Within section 5.2.3, I argued that leaders within the Individualist stage of AED demonstrated several ways of working that could be advantageous to an individual running a complex organisation. Individuals within this Individualist stage could comprehend and respond to a greater degree of complexity within their organisation, comprehend and recognise the wicked features of incidents common to their role, work with others in a developmental mutual way and recognised the value of feelings within an incident. They were recognised in substantively different ways compared to others in different AED stages.

I recognise that there are limits to any claims that these differences in practices are advantages at this relatively early stage of enquiry. In section 5.2.3, I cross-compared practices of AED alongside several lines of academic educational leadership enquiry to establish that HT/Ps work in complex environments with wicked problems, and that comprehending and responding to these features,

working with people in a developmental and mutual manner and responding to affect within situations, could be advantageous within the role of a HT/P. However, such claims are not attached to any specific organisational outputs, and any attempts to do so could be hotly contested. Securing stronger student outcomes is a dominant voice in the field, despite whether such a direct association is plausible (Witziers, Bosker and Kruger, 2003; Hallinger, 2018). Whilst other factors that could determine successful leadership, such as employee retention and satisfaction, has received attention in the general leadership literature (Rooke and Torbert 1998, 2005; Barker and Torbert, 2011), this is not so much the case in educational leadership. Determining what is and what is not advantageous is a topic of debate in of itself. Therefore, in managing my own claim of advantages, I recognise that establishing the practices outlined in HT/Ps within the Individualist stage as advantages requires further work. I would suggest that such work:

1. Needs to recognise that specific patterns, such as those established within this thesis, should be observed within a larger sample.
2. That the full range of AED stages, including the Autonomous stage, is observed.
3. There needs to be clarity on the potential advantages of such practices to specific organisational outcomes.

### *5.3.4 The WUSCT as an Assessment Tool*

The approach of the WUSCT to identifying AED stage has some limitations. These limitations explain some of the findings in this study and offer reflections for further work in this domain. The first limitation is in the ability of the WUSCT to identify individuals beyond the Individualist stages of AED. There are several reasons behind this. Cook-Greuter (2004) and Krettenauer (2011) claims that the WUSCT is less sensitive to individuals beyond the Individualist stage due to the underdevelopment of later stages within the theory. The work of Lahey et al. (2011) in developing an interview for measuring adult development, the Subject-Object Interview, could suggest that interrogative methods are more sensitive to the complex structures underpinning sense-making. Indeed, the insensitivity of the WUSCT to later stages of AED has come to light in the results of this study. In section 3.5.4, I undertook extensive attempts to identify individuals beyond the Individualist stage. Despite this, I could not identify any individuals within the Autonomous stage. Although this was a small-scale study, I cannot rule out that the underlying theory and the WUSCT assessment tool might not have been sensitive enough to identify those in the Autonomous stage and thus limit the capacity of the study to establish the relevance of AED to leadership practice.

The second limitation is the cultural sensitivity of the WUSCT. The last iteration of the WUSCT was in 1998. Some of the statements within the test are potentially outdated. For example, neither the sentences nor the assessment framework takes the following changes into account:

- Statements on husband and wife imply that marriage is between man and woman. This changed in the UK with the introduction of civil partnerships and same-sex marriage (Marriage (Same-Sex Couples) Act, 2013).
- Many of the sentences rely on a binary view of gender, which is increasingly under scrutiny from many aspects of society (Stonewall, 2016; Matsuno and Budge, 2017).

For a test that looks to assess the capacity of a psychosocial construct, such cultural sensitivity is vital. Psychosocial theories allude that we make sense of ourselves in relation to our environment (Sullivan et al., 1968). Loevinger herself argued that the initial strength of the WUSCT, and thus her model of AED, was the revision of theory considering changing responses to the test (Blasi, 1998). Thus, without any further revisions of the WUSCT, it can be argued to have a diminished capacity for assessing adult development.

The other limitation of AED theory is its limited granularity. Adults could only realistically be expected to be assessed within 1 of 4 stages. This is because the Integrated stage is considered largely theoretical, and stages before the Self-Aware stage are likely to be frequented by adolescents. Other models of stage development challenge this. For example, Kegan's model has sub-stages within each order of consciousness/stage of development. This approach means that individuals can be scored as they progress through stages, making their stage result more nuanced, less arbitrary, and more reflective of individual difference (Kegan 1982; 1994). Furthermore, action logics (Rooke and Torbert 1998) recognise adults across the developmental stages and thus offer greater differentiation. In summary, other models of development might offer a more nuanced perspective on individual development than the WUSCT and Loevinger's AED model.

However, these weaknesses within the WUSCT must be considered in the light of the weaknesses within other AED assessment. Some of these tests, such as the subject-object interview (Lahey, 2011) and the LDP (Barker and Torbert, 2011), claim to have greater potential for identifying post individualist stages of development. However, none of these methods enjoy the same degree of accessibility or use within the field. Furthermore, neither method has undergone the same external peer-review assessment as the WUSCT (section 3.6.1). A recent review by Lanning et al. (2018) showed there were statistically significant narrative and linguistic differences within how individuals



of each AED stage expressed their reasoning behind their WUSCT responses. Thus, the WUSCT remains sensitive to underlying differences in structure, and therefore able to identify individuals in different stages of AED. Also, the WUSCT continues to be utilised across different disciplines (e.g., Jespersen, Kroger and Martinussen, 2013; Lilgendahl, Helson and John, 2013; Syed and Seiffge-Krene, 2015; Lanning et al., 2018). This suggests that the wider research field still accepts the WUSCT as a relevant psychometric measure of adult development. I would therefore argue that replacing the WUSCT with another test would open any future study to a different set of problems that could compromise the validity of assessment across all AED stages, and not just those within the post-Individualist stage.

One solution to this problem could be to triangulate methods for assessing AED. Triangulation is the use of different methods to study the same phenomenon (Robson, 2002). It could be that the Subject-Object Interview could be used in conjunction with the WUSCT. In future research, I would therefore argue that using two methods of assessing adult development might meet multiple aims. The Subject-Object Interview could offer the greater acuity of assessing post-individualist stage, whilst being able to call on the convenience, access and statistical strength behind the WUSCT. Although there is an underlying assumption that the assessments between adult development models can achieve comparable results (Wilber, 2000), comparing the tests of their equivalency has not been done. Investigating the equivalence of these tests should therefore be a pre-requisite for any future research within this domain.

### ***5.3.5 Summary***

In this section, I have outlined the limitations of this study. I have acknowledged that these weaknesses limit the study's generalisability, both in establishing the relevance of AED and the themes themselves. I have made the case that, despite these weaknesses, I have managed to establish the promise of AED for how HT/Ps lead their schools. I have suggested overcoming these two limitations of future work by increasing the size of the sample and incorporating the subject-object interview into the assessment of the AED stage.

## **5.4 Unique Contributions to Theory, Research and Practice**

This section will first describe how the results of this study provide three unique theoretical contributions. This will be argued through the contribution of a unique data set, establishing the potential of AED as relevant theory of educational leadership and how AED its potential as a

conceptual filter from which to extend, expand and critique other notable educational leadership theories. I will outline how the results from this thesis offers reflections on the practice of educational leadership through challenging the conceptualisation of the HT/Ps role as well their development, recruitment and performance. Finally, I will outline the unique contributions that this thesis offers for methodology within the field of adult development and educational leadership. I will discuss how this thesis novel methodological design highlights the potential of a qualitative approach to studying AED in leadership practice and how this thesis has provided important and novel tools for the study of AED within educational leadership for future studies.

#### *5.4.1 Establishing the Potential of AED as a Relevant Theory for Educational Leadership*

This empirical data represents the first attempt to study AED within HT/Ps. I have shown that there were substantive differences in how HT/Ps in different stages of AED comprehended and responded to the complexity within the organisations and the types of tasks that they are regularly responsible for. These substantive differences occurred within how HT/Ps handled the task, how they worked with others, the role of feelings, their wider understanding of complexity and in how others perceived them.

Furthermore, there appears to be themes relating to the Individualist stage of AED and:

- The extent to which they comprehended and responded to the complexity within the organisation.
- The extent to which they comprehended and interacted with the features of wicked problems.
- The formation of mutually collaborative and developmental relationships with those around them.
- The capacity to recognise feelings as inherent within an incident and the organisation.

AED has not previously been used in this way to study HT/Ps practice. Furthermore, this is the first time that AED has been used as a conceptual framework to explore:

- How HT/Ps comprehend and respond to wicked problems within their organisations.
- How they comprehend and respond to wider organisational complexity.
- How others perceive them.

In section 2.2.8, I critiqued approaches that attempted to explore AED within leaders from other sectors. I stated that approaches prior to this thesis was overly focused on efficacy and establish general patterns without specifying tasks that would engage individuals in sense-making. The predominant focus of the field had resulted in general, limited observations on different AED stage. Examples include: A recognition that stages of AED could be linked to a greater comprehension of complexity (e.g., Pfaffenberger and Marko, 2011). However, there was a limited understanding of the actual ways of working that can differ when engaging in tasks (e.g., Fisher and Torbert, 1991) and what specific aspects of complexity were being comprehended. Another example is the general reflections of emotional awareness (e, g. Reams, 2017) without stating specifically how leaders comprehend and respond to affect. Or, stating ways of working with others as more collaborative in later stages (Harris and Kuhnert, 2008; Strang and Kuhnert, 2009), without describing what form this collaboration took. Indeed, often these studies would not include mechanisms for ensuring that the participants were responding to tasks whereby sense-making, and therefore AED, was required in formulating a response (Section 2.2.8). Without detailed insights and appropriate research designs, I stated that it would be far harder to confirm themes as emerging from AED and limited the capacity for understanding AEDs specific influence on leadership practice.

However, in this thesis, I have produced detailed insights into these areas across the three case studies. This is the first time within HT/Ps and thus is a novel data set for establishing the relevance of AED and how it applies to their practice. Furthermore, I have both replicated some of the general themes observed in studies of general leadership practice and extended them through greater detail and more nuanced insights. Consequently, this level of detail alongside, extensive cross-checking with Loevinger's underlying AED theory (section 5.2.2) and a methodology which can be said to have elicited sense-making protocols, can strengthen previous claims of the relevance of AED to practice of HT/Ps and leaders more broadly. Although more research is required to enhance the transferability of my detailed observations, I believe the data in of itself offers an original contribution to knowledge within the field.

Furthermore, these results offer two more unique contributions to the theoretical field of educational leadership. The first contribution is through demonstrating the potential of AED as a theory of educational leadership. Second, these results show how AED offers a conceptual framework which can extend and explain other theories within the field of educational leadership.

In section 2.2.1, I established a clear theoretical position for the leadership of educational organisations. That, as individuals who are responsible for their organisations, HT/Ps will:

- Be required to recognise the wider organisational complexity within the organisation.
- To comprehend and respond to wicked problems.
- Need to collaborative, mutual and developmental relationships with their staff.
- Need to comprehend the pivotal role of affect within their organisations.

This thesis offers a unique contribution in demonstrating the AED is relevant for how school leaders engage in these domains. For the first time in the educational leadership literature, Loevinger's theory of AED was cross-referenced with the expectations and understanding of educational leadership theory and practice. Through this process, I demonstrated that AED, and therefore individual level sense-making, could explain the differentiation in how HT/Ps engage in these critical aspects of their role. Furthermore, this process highlighted the potential advantages that later stages of AED might have for comprehending great degrees of organisational complexity, acknowledging more of the features of the wicked problem, the development of mutual and collaborative relationships, and in comprehending the role of affect. The results from this thesis confirmed that the sense-making process orchestrated by an individual's stage of AED helped to shape how individuals engaged with wicked problems and wider organisational complexity. Furthermore, the results from the thesis suggested that, based on these four domains, how later stages of AED could appear to hold specific advantages in how to navigate these challenges within school leadership. Thus, my thesis offers unique contributions to the field of educational leadership by theoretically and empirically demonstrating the relevance of AED to the understanding and practice of educational leadership.

Given that the results supported the initial theoretical position outlined in the literature review, I would suggest that a unique contribution is demonstrating the potential for a theory of educational leadership that places sense-making at its core. Initial thinking around this idea was presented in a paper entitled 'Integrative Leadership' (James, 2019) at BELMAS 2019.

However, this study is based on a small (albeit intensively studied) sample. I outlined these implications in section 5.3. There are implications for the extent to which this result can be transferable and, therefore, these themes will require further examination. I would, therefore, argue that I have, at most, established the potential of AED as a relevant and new line of enquiry for understanding the leadership practices of HT/Ps. Furthermore, I recognise and would actively encourage further work in this domain to explore the untapped potential of this new line of enquiry for educational leadership.

Subsequent analysis has demonstrated that AED also offers unique contributions in explaining and extending other theories within educational leadership. In comparing how HT/Ps of different stages with the expectations of educational leaders from theory and research, several of the key expectations of HT/Ps are related to later stages of AED. For example, many scholars call for the recognition of educational organisations as complex (Morrison, 2002, 2010; Hawkins and James, 2018) and state the role of the HT/Ps in handling wicked problems (Leithwood, Begley and Cousins, 1994; Murgatroyd, 2010). In this thesis, I observed there was greater comprehension and response of the complexity of organisations and a task as wicked in each subsequent stage of AED. Furthermore, many theories of educational leadership, as well as many policy documents, call for HT/Ps to work collaboratively across and within organisations (Woods and Roberts, 2018; Stoll McMahon and Thomas, 2006; Hargreaves and O'Connor, 2018). My results demonstrate that enacting collaboration differs according to the stage of AED. In many of these models, the model of collaboration is based on mutually collaborative, developmental relationships. Yet, it was only at the Individualist stage were such features emerged as a defining feature of how HT/Ps collaborated with those around them. Finally, recognition of feelings was a prominent practice of later AED stages and this particularly important for those who consider the importance of affect in understanding educational organisations and leadership practice (Crawford, 2009; James, Crawford and Oplatka, 2019; Kelchtermans, Piot and Ballet, 2011).

The comparisons of these themes within the educational leadership literature to what I observed in later stages of AED can make a unique and important contribution to the field. Through these comparisons, I have begun to establish how many theories of educational leadership inadvertently expect HT/Ps to operate the Individualist levels of AED. This finding is a original observation as it has not been made before this study. This observation can offer three main reflections on how AED can expand and extend other theories. The first reflection is through recognising how some of these practices suggested by educational leadership theory might be out of range of most of the population. Stages beyond the Conscientious stage within an adult population are uncommon. Cook-Greuter (2004) has noted that development beyond the Conscientious stage is not common-place and those that have mapped the distribution of stages within a given population also support this claim (Lanning et al., 2018). Indeed, within this study, only seven out of the 20 participants had developed to the Individualist level of AED. Therefore, in recognising how uncommon later stages are, it is possible to suggest that the concepts expected or assumed by several theories of educational leadership might not be accessible to most individuals in the general population without subsequent development of their stage of AED.

The second reflection is how, due to the link between many of these practices and AED, the adoption of these practices will be dependent on the context. Stages of AED are far from immune to context. In fact, Hauser (1976) is clear that the ego mediates thought, behaviour and response. AED is grounded in psychosocial psychology: a branch of psychology recognises behaviour, thought, and wider development emerge because of the interactions between individual and environment (Sullivan et al., 1968). Environments that are overly demanding or stressful can, through defence mechanisms, induce regression to earlier stages of AED (Bursik 1991; Gilmore and Durkin, 2001) and thus encourage individuals to engage in approaches that are more reflective of earlier AED stages. This regression will influence how leaders make sense of their context and how they are likely to respond. AED, therefore, helps by providing a psychological framework for understanding how the application of many of these practices desired within theories of educational leadership require a set of environmental conditions conducive to optimum psychological functioning.

The final reflection is how developing the skills and practices demanded by educational leadership theories could require an alternative developmental paradigm. I have suggested that development of key leadership practices, such as collaboration, the recognition of affect and appreciation of complexity, are related to later stages of AED. If these practices, which are desired by educational leadership theory, are linked to the stage of AED, then any development programme that seeks to develop HT/P might need to consider how to develop an individual's AED if such practices are the goal. McCauley et al. (2006) and Kegan and Lahey (2009) refer to horizontal development as the movement between stages that have transformative effects on the individual and those around them. However, approach that focus on a set of knowledge, skills and attributes that a leader should develop competency are currently the mainstay of leadership development for educational leadership (Bush and Jackson, 2002; Chin, 2003; Huber, 2010; DfE, 2017). I discuss the implications of this in section 5.4.2.

In summary, this thesis has observed an overlap between the later stages of AED sense-making and the expectations across many theoretical domains of educational leadership. Through this overlap, I had made unique observations which expand and build on current educational leadership theories and narratives, especially concerning the demands placed upon adults, reaffirming the importance of a supportive context and in raising questions about how we develop adults to meet these demands.

### *5.4.2 Reflections for Professional Practice*

In this section, I will outline the implications that these results have for the professional field of educational leadership. First, I will describe how the patterns found in the Individualist stage of AED, when considered alongside the demands of Educational Leadership, offers reflections for how we conceptualise the role of the HT/P. Second, I will discuss how the results suggest we should be empathetic to the demands that headship places on individuals, and how the results suggest the potential for the adult development literature to inform the design of professional development experiences.

#### **Adult Development Challenges Our Understanding of the Role of the HT/P**

While there is no shortage of texts that states how HT/Ps have a difficult, challenging and demanding role (James and Vince, 2001) there is little academic theorising as to what is specifically challenging about leading a school as a HT/P. In attempting to define challenge within the context of educational leadership, I drew upon a range of policy, theory and research to illustrate how the role of the HT/P is challenging. In section 2.2.1, I outlined how, in conducting the responsibilities within their role (Connolly, James and Fertig, 2017) HT/Ps working within complex organisations (Hawkins and James, 2018; Morrison, 2002) and that many of their responsibilities can be considered wicked problems. Furthermore, they will require significant skills in how they work with others and how they interact with affect. This in of itself is an academic piece of theorising that is not prevalent within the educational leadership literature, and a piece of work which should be continuing to be refined further. In addition, the association between the Individualist AED stage and ways of working that would support a HT/P in navigating these demands, adds another dimension to why their role is challenging. Not only is it rare for adults to occupy the Individualist stage (Cook-Greuter, 2004; Lanning et al., 2018) it is also widely recognised that development into this stage is hard to achieve and is insensitive to typical developmental approaches (King et al., 2000; Manners, Durkin and Nesdale, 2004; Vincent, Ward and Denson, 2013). Thus, one of the key implications of this thesis is exposing how the underlying expectations and challenges placed on the of the role of HT/P unintentionally demand sense-making capacity beyond that typically found in the general population and requires development that is both unconventional and rare.

There are two implications of this observation for practice. First, this thesis demonstrates the power of AED in comprehending the challenges that HT/Ps face on a day-to-day basis. Organisations, tasks and theory that HT/Ps engage with are implicitly requiring HT/Ps to operate at a level of development that is rare for most adults. I therefore suggest that AED offers a new tool for

empathising with the demands of headship and conceptualising the notion of challenge in leading schools. Second, these findings help us to understand the implications of the changing demands on HT/Ps. The role of the HT/P is expanding to include roles outside their organisation. For example, HT/Ps are expected to support other schools (Greatbatch and Tate, 2019). They might also have direct responsibility for other schools or educational organisations as Executive HT/Ps (National College for Leadership of Schools and Children's Services, 2010) and can be expected to lead on areas such as Initial Teacher Training (DfE, 2019). However, as system-level roles, they will be expected to engage with an even greater degree of complexity and wicked tasks. This could practice greater demands on the practices associated with the later stages of AED.

Both these points raise a series of questions around HT/P development and recruitment. If there is potential demand for HT/Ps to operate at later stages of AED, one point of view could be to recruit such individuals. Another position could be to incorporate stage development into professional development programmes. It is this debate to which I now turn your attention toward.

### Reflections on HT/P Recruitment, Selection and Development

The relevance of AED to the practice of a HT/P raises an important question about HT/P development and selection. The first of these questions arose directly in working with practitioners throughout the project:

*Could these results be used to justify the role of AED as an assessment exercise for establishing whether an applicant is ready to take on the role of school leadership?*

Psychometrics is an important part of many recruitment processes across different industries (Lord, 2007). This thesis has suggested that specific advantages exist within the later stages of AED in responding to the organisational complexity and wicked problems inherent within educational organisations. Establishing whether someone is at a later stage of AED can be measured reliably using the WUSCT and is a protocol which, although time-consuming and requires some specialist knowledge, is generally accessible. On reflection, suggesting that there is a potential psychological assessment for the strengths within the later AED stage, I could be at risk of implying that such processes have a place in identifying individuals ready for headship. This study, as a small-scale study, would not be able to answer this question directly. However, as I have advocated for conducting a larger-scale study to validate the findings from this research (section 5.3), it is still none the less an important question to address.



I would argue that using an individual's stage of development as a selection or recruitment tool would neglect critical aspects of AED theory. Recruiting with a specific AED stage in mind, in a manner outlined above, assumes that an individual's AED stage can overcome contextual barriers. However, AED does not control behaviour regardless of contextual factors. First, the ego stage only serves to mediate behaviour (Hauser, 1976). Second, as a psychosocial construct, it postulates that psychological functioning occurs through a dynamic between the self and environment (Westenberg, Blasi and Cohn, 1998; Bauer, Schwab and McAdams, 2011). Specifically, an individual's external environment can influence the expression of an individual's AED, as discussed earlier on. It is for these reasons that Drago-Severson (2004) and Levine (1989) suggest how the holding environment is important for facilitating adults to operate at their optimum and to continue their growth. Therefore, I would argue that it would not be enough for individuals to enter a HT/P role operating at the Individualist stage. The environment would also need to be appropriate to facilitate individuals to maintain working at this level.

Instead, the results of the thesis stress the importance of intentional continuing professional development (CPD) and offers two unique insights into this domain. The first insight is to make a new case for CPD for HT/Ps. Associating the sorts of practices that could be supportive to HT/Ps in leading their settings to a developmental theory challenges trait leadership narrative: that such practices are as a result of a great (wo)man and their fixed traits or innate capacities (Northouse, 2016). Instead, I have begun to establish a link between these desirable practices and a construct that can grow over the life span. Indeed, by demonstrating how several of these practices lie within the later, Individualist stage of development, I have stressed the importance of training and development. As previously discussed, it is unlikely for most HT/Ps to be within this stage of development and that such development will require significant, proactive and intentional development. Therefore, if we are going to expect HT/Ps to respond fully to the complexity inherent within their organisations, CPD across the career span will be important so that individuals are developmentally ready for the challenges they will face.

The second unique contribution concerning CPD is to provide empirical evidence for the calls of others to incorporate adult development approaches to HT/P preparation. Day et al. (2014) distinguished that adult development might promote more distal outcomes (outcomes worked on multiple levels that they could integrate within a response to a problem), believing this to be more beneficial than proximal outcomes (discrete areas of knowledge or which only focused on a single skill). Kegan and Lahey (2009) concur with this point, stating that traditional leadership training

focused on vertical development, which supports individuals to make the most of their current level of development through working on specific skills or relating to specific knowledge domains. This approach contrasts with horizontal development. Horizontal development is recognised by Kegan and Lahey (2009) as focusing on promoting leaders' sense-making to a higher adult development level, so they are prepared to recognise the complexity that exists within organisations. Within the education sphere, Drago-Severson (2012) has been the most notable contributor, claiming that *"leadership development is adult development"* (p. 47) and building a leadership model, based on adult development theory, for school educators. Across these three scholars, there are two unified ideas: that focusing on traditional leadership learning might be insufficient, and adult development theory could develop leaders so that they can tackle the wider complexity within an organisation.

This narrative is at odds with most developmental programmes in school leadership preparation. Yukl (2012) summarises the necessary content of leadership development programmes along four key areas:

- effective direction setting
- relationship building
- change management
- external environment navigation.

These foci are echoed within HT/P development programmes. For example, the DfE's guidance for their National Professional Qualifications stipulates (DfE, 2017) development programmes should develop a leader's capacity to:

- 6.4.2/3/4 Evaluate the benefits and risks of different strategies
- 4.1.1. Establish relationships with others within and outside of own team, deploying appropriate structures and/or processes to mitigate against any barriers
- 4.4.3 Analyse research into, and examples of, expanding and/or joining a school partnership successfully, including an academy chain, and applies findings to own plans.

Bush and Jackson (2002) surveys on HT/P development programmes in Ontario and England found that both programmes focused on organisational, transformational, and instructional leadership as well as professional development, finance, and curriculum. Huber (2010) observed that school leadership programmes focused on learning, team development and improvement. Chin (2003) also observed that HT/P development programmes focused on areas of knowledge which should be

incorporated into programmes – such as legal, quality management and school evaluation. In summary, school leadership development programmes typically focus on developing the knowledge and skills of HT/Ps ranging from quality control, curriculum, decision-making to finance. In addition, there are consistent with how they need to maintain relationships within their organisation.

However, up until this thesis, there has been no empirical work exploring differences according to adult developmental stage and how HT/Ps lead their organisations. Claims of the relevance of AED to HT/P leadership development, and therefore any calls to change the focus of the programmes outlined above, have had to rely theoretical grounds. Critically, this thesis has demonstrated that there are substantive, qualitative differences according to the AED stage for the first time.

Furthermore, many of the practices and demands of the HT/P role relate to later stages of AED. This thesis, therefore, strengthens the calls for an increased focus away from traditional development programmes to embrace approaches based on adult developmental practices.

Therefore, the unique contribution to understanding HT/P recruitment and development is as follows. Although tempting to consider the AED stage as a recruitment tool, such an approach would undermine the underlying theory of the ego, which stresses the need for an environment that facilitate individuals working at later developmental levels. However, establishing an association between how HT/Ps lead their school has provided some empirical support, which did not exist previously, to the claims of Day et al. (2014) and Drago-Severson and Blum-DeStefano (2014) that leadership development programmes need to make use of adult development theory within their CPD.

### *5.4.3 Unique Contributions to Methodology*

Before this thesis, there had no previous attempts to study AED in HT/Ps and their leadership practice. The dominant approach to studying adult development within leadership has utilised alternative models of AED, such as Rooke and Tolbert's (2005) action logic model. In establishing patterns within a leader's practice, research has mainly focused on establishing general effectiveness through 360 feedback mechanisms which reported on perceptions of a leader's practice (Bushe and Gibbs, 1990; Bartone et al., 2007; Strang and Kuhnert, 2009). In section 2.3.2, I identified that there are several problems with such an approach and that new methodological innovations could enhance claims that AED is a relevant construct in the understanding of a HT/Ps practice. Through conducting this research, this thesis offers three original methodological contributions to the field. Namely, establishing the case for a qualitative paradigm in the study of AED and HT/P practice, use

of triangulation through two tasks to enhance research quality and a new procedure for designing research vignettes.

### The Case for a Qualitative Approach

The first contribution is enhancing the case for a qualitative approach to researching the relationship between AED and leadership practice. It is the rich, qualitative data within this thesis provides that facilitated new, more nuanced insights into the relevance of AED. For example, both Bartone et al. (2001) and Harris and Kuhnert (2008) observed an increasingly collaborative approach further up the stages. However, as their respective studies used 360 feedback mechanisms, there is little to determine what such collaboration entailed. However, through my qualitative approach, I could observe the form of collaboration that took place during the task. This nuance is important – it allowed me to observe that it was not the case that those in earlier stages collaborated less with those around them. What differed was not volume, but the approach to collaboration. This was the same for themes such as complexity. Whilst Pfaffenberger and Marko (2011) hypothesised that leaders in later AED could work with greater degree of complexity, it was the qualitative paradigm outlined in section 3 that could observe exactly what features of complexity become more apparent in later stages.

Achieving this nuance was only possible by collecting the rich description with which leaders in each stage engaged in the specific activity. In section 5.4.1, I have highlighted how it is such nuance that provides new insights and extends previous work. Therefore, as one of the few studies that have attempted a qualitative approach to the question of AED and leadership and the first within the domain of educational leadership, I feel the insights and data achieved demonstrate the untapped potential that a qualitative paradigm can bring to establishing AED as a relevant construct within this discipline.

### Triangulation Approach

The second contribution to methodology is the tools and approaches developed to conduct this study. Qualitatively documenting how HT/Ps (and leaders in general) comprehend the complexity of their organisation, how they comprehend and respond to wicked problems within them and how others respond to them in relation to AED stage is an underdeveloped area of empirical research. Only two studies have documented the response of individuals within different stages of AED and how they respond to organisational tasks (Merrion, Fisher and Torbert, 1987; Fisher and Torbert, 1991). Consequently, prior to this study, there were few examples which could be used from which

researchers could develop and develop a robust approach to establishing differences in practice within HT/Ps of different AED stages. I would therefore argue that any new study in this domain, such as one attempted in this thesis, can provide unique insights and reflections to others who seek to collect reliable, valid themes in this domain.

An example of such an insight is the use of two different tasks to increase confidence that the response to the incidents could be reliably attributed to the sense-making process conducted by the ego. The field has typically made use of one instrument to capture how leaders respond - ranging from an interview (Vincent, Ward and Denson, 2015), a pre-determined task (Fisher and Torbert, 1991) or 360 feedback forms (Harris and Kuhnert, 2008). Utilising one approach, particularly when exploring the impact of a largely unconscious device such as the ego, cannot rule out the influence of the nature of the task upon the responses obtained. Therefore, the response could reflect the demand of the task set and not necessarily that of their sense-making system (Wolgemuth et al., 2015; Collett and Childs, 2011). Without a more robust approach, any potential association between the data and the underlying theory (AED) could be compromised.

In recognition of this issue, I maintained the tradition of triangulating the perspectives of different individuals (e.g., Bushe and Gibbs, 1990; Harris and Kuhnert, 2008; Strang and Kuhnert, 2009) but also engaged in triangulation through different data collection methods. This was the first time that multiple tasks were used to determine how individuals within each stage comprehended and responded to specific tasks. I asked participants to recall a critical incident (Rittel and Webber, 1973) and anticipate how they would respond to a hypothetical critical incident. The rationale for these two specific tasks, as outlined in section 3.9.3, is that each task rules out the subsequent weakness of the other. As I could be more confident in ruling out the effect of task-specific demand on the response, the credibility that their response reflected their sense-making via the ego was increased. Therefore, one of the unique methodological contributions of this study is to offer a more potentially more credible approach to exploring the relationship between AED and leadership practice.

### **Design of the Vignettes for the Hypothetical Critical Incident**

I made a substantive, innovative change to the vignette method to enhance research quality. The vignette method traditionally uses the main research team as the writers of the problem, then using professionals in the field for validating this design (Hughes and Huby, 2004; Bradbury-Jones, Taylor

and Herber, 2014). Instead, I developed a co-construction approach, utilising HT/Ps and school professionals as the main writers of the hypothetical critical incidents used in the research.

The substantive change was driven by the following rationale:

- 1) Ensuring that the HT/Ps recognised the vignette as a plausible incident that they could anticipate having to address within their setting. Finch (1987) recognised that familiarity is critical, and Hughes and Huby (2004) and Gould (1996) recognised how internal validity of these tasks can be a concern if these criteria is not met. In section 3.6.3, I argued that, without incorporating the HT/P as a key designer of the hypothetical critical incident, that interaction with the problem and therefore the quality of the insights obtained (section 3.9.4) could therefore be compromised
- 2) The need to access sense-making as conducted by the ego. As outlined by Holt and Cornelissen (2014), not all tasks require sense-making. I suggested in section 2.1 that tasks need to be sufficiently 'wicked' if they are to engage individuals within sense-making. Thus, If the task were to access the individual's sense-making, the task needed to be a good example of a wicked problem.

I determined that a new, novel approach to vignette design could alleviate these challenges. This approach, which I have called 'co-construction', is described in section 4.5.3. This 'Co-construction' approach has not been previously documented with the field of educational leadership, or in great depth within the wider literature. The approach offers several advantages to the standard approach. By giving the practitioners the role as the primary designer from the outset, there would be an increased likelihood that the incident within the vignette will include the nuanced detail that reflects day-to-day lived reality that HT/Ps are likely to face. At the same time, by keeping the research team involved with the design, they can ensure that the theoretical purpose of the vignette (in this case, to illicit sense-making by ensuring the task met the features of the wicked problem) can be maintained. Therefore, another unique methodological contribution of this thesis is to provide a new methodology for designing vignettes for research purposes that can enhance the credibility of the data produced.

The vignettes produced within this thesis themselves can also be considered a unique methodological contribution. As a result of this intense design process, two vignettes have been designed by HT/Ps across a range of different settings and contexts (Appendix 5) which can be

considered good examples of wicked problems. Given that there are few to no examples of such vignettes within the literature, these products themselves are good research tools. With further expansion and refinement, they could be produced as a research tool that can be utilised by other researchers wishing to explore wicked problems.

In summary, I have offered several unique methodological contributions to the field through this thesis. The use of AED to understand HT/Ps practice had not been attempted prior to this thesis. Developing methodological approaches which the field can use will, therefore, be critical to establishing this line of enquiry within educational leadership. Given the critique of the methodologies employed to date, I believe this thesis can provide a starting point for how qualitative approaches could establish rich, nuanced themes of a HT/Ps practice in relation to their AED. Furthermore, novel techniques to triangulation and vignette design could support others in collecting credible data that exposes sense-making and produce credible themes of a HT/Ps practice. All three of these insights, with critical reflection and further debate, could provide a starting point for this new line of enquiry in educational leadership.

#### *5.4.4 Summary*

This thesis has made several unique contributions to the field. As studying AED in HT/Ps had not been investigated previously, the primary data itself offers original insights and contributions to field. A substantive proportion of the primary data has now been published through peer review (Gilbride, James and Carr, 2020). Analysis of AED considering the literature, and the substantive differences observed between AED stages, suggests the potential of AED to offer a new line of enquiry within the field of educational leadership. In addition, I have discussed how AED can help us extend and expand other theories of educational leadership through reconceptualising the demand that such theories place on HT/Ps. In understanding issues of practice, the results and underlying theory have facilitated insights into how we conceptualise the challenges that HT/Ps face within their role, as well offer considerations for HT/P development and recruitment. Finally, I have introduced novel methods into the field of enquiry, such as the use of two tasks in triangulating the response of participants, in addition to reformulating the vignette design method to enhance the data quality.

Having summarised the key unique contributions for theory, practice and methodology, I will now move to conclude this thesis.

## Chapter 6 Concluding Comments

In this thesis, I have sought to establish the relevance of AED in understanding the practice of HT/Ps. A substantive way in which a HT/P can be said to engage in leadership is through how they comprehend and respond to the wide range of responsibilities within their role. How HT/Ps act in relation to these responsibilities will influence their organisation and individuals within them. However, many of these responsibilities can be considered wicked problems which occur within complex organisational contexts. To comprehend, and subsequently respond, in such circumstances, the HT/P will need to engage in sense-making. Sense-making is an individualised process that is dependent on the individual's stage of AED. Each stage of AED, as conceived by Loevinger (1976), represents substantially different ways in which individuals actively make sense of themselves and the world around them. This process subsequently mediates how individuals interact and respond to the situation. Based on this rationale, I suggested that substantive differences could be observed in how HT/Ps of different AED stages would comprehend and respond organisational complexity and wicked problems. I also suggested that such substantive differences in response would also influence how these HT/Ps might be viewed differently by those around them.

Exploring the role of AED within a HT/Ps' responses to organisational complexity and wicked problems has not been explored prior to this thesis. There have been attempts to explore the relevance of adult development models to leadership practice. However, whilst such attempts demonstrate the potential relevance of AED, their limitations would prevent extrapolation of the findings to the specific challenges that HT/Ps face. Hence, there was a clear need for research that could demonstrate the potential of AED to help understand how HT/Ps lead their organisations and how others experience them.

The research involved 20 HT/Ps from across England. These HT/Ps were selected at random from a pool of HT/Ps who had volunteered to be part of the study. Each HT/P was assessed for their stage of AED using the procedures and protocols from the WUSCT (Hy and Loevinger, 1996). In the sample, there were five individuals who scored at the Self-Aware stage, eight within the Conscientious stage and seven within Individualist stage.

Each HT/P was interviewed on a wicked problem that had occurred within their school and a hypothetical wicked problem that was created as part of this research. To triangulate the responses of the HT/P, two individuals that worked with their HT/P (a Chair of Governors and a Deputy HT/P) were also asked to use their experience of the HT/P. Common themes from across the tasks and



individuals for each individual HT/P were aggregated. HT/Ps were then organised into their AED stage groups. The themes from those within a specific AED group were then aggregated into a set of themes that described the common approach taken by those in the group. The data formed the basis of the case studies presented in the results section. Each case study, therefore comprised of how the HT/P within a given stage of AED would comprehend and respond with their context and how they were perceived by those around them.

Across the stages of AED, substantive differences in the practice of HT/Ps were observed within the following domains: How HT/Ps comprehended and interacted with incidents that were wicked problems; the role they would give to others; the extent to which feelings were considered within the event; how others perceived them; and their comprehension of complexity. Both the overarching patterns between the stages, as well as the stage-level nuances, are reflective of Loevinger's original AED theory and previous attempts that applied adult development theory to leadership practice.

Furthermore, the specific features Individualist stage, exhibited through the HT/Ps practice, suggested that later stages of AED could hold specific advantages in the leadership of educational organisations. In the Individualist stage, HT/Ps recognised key features of complex organisations, such as emergence and ambiguity, which suggested capacity to consider the complexity inherent within the organisation and the task itself. The response of the HT/P to the wicked problems inherent within their responsibilities is an important part of the HT/P's role, yet it was those in this stage that interact with several 'wicked' features of these problems. The mutually collaborative and developmental relationship, revered and expected by a diverse range of educational leadership discourses, was a notable feature of the Individualist stage. Finally, it was these HT/Ps that recognised the importance of feelings within incidents, thus acknowledging the importance of affect within educational organisations. Therefore, it was HT/Ps within the Individualist stage that appreciated their organisation as complex, the 'wickedness' of the wicked problem, the central role of others and the affect inherent within educational organisations.

These results have implications for research into educational leadership. First, these results suggest the potential of AED could be an important consideration in how HT/Ps influence their organisations and the individuals within them. As this had not been studied previously, the case studies provide a novel data set, and the subsequent discussion opens a new line of enquiry for researching how HT/Ps lead their settings. Thus, AED can provide insights of its own accord as a potential theory of educational leadership and management.

In addition, I have shown how AED potentially offers a new conceptual framework which could enhance and explain other theories of educational leadership. For example, many theories ask HT/Ps to collaborate meaningfully with their staff (Hargreaves and O'Connor, 2018; Woods and Roberts, 2018). Yet, it is only within a relatively later and much rarer Individualist AED stage that this practice emerges. The same can be said for research that claims the importance of HT/Ps understanding their organisation as complex systems (Hawkins and James, 2018; Morrison, 2002), that places a priority on how HT/Ps handle the wicked problems within their organisations (Leithwood, Begley and Cousins, 1994; Murgatroyd, 2010; Armstrong, 2017) and the importance of recognising affect within educational organisations (Crawford, 2009; James, Crawford and Oplatka, 2018). Because of the findings within this thesis, we can now begin to understand other theories of educational leadership in a new light: Models that promote complexity, collaboration, problem management and affect as key features of leadership are unintentionally expecting individuals to operate within a later and less common stages of AED. Therefore, AED theory helps to understand how we might under-appreciate how challenging some of these practices are for leaders to adopt. Thus, I have demonstrated the potential that AED has as a provide a model that can extend and explain other theories of educational leadership.

There are also implications for practice. With the association of many of the practices associated with later and rarer stages of AED, we should consider the role of the HT/P as more demanding than previously recognised. This opens the question for HT/P recruitment and development. I argued, given the size of the study and the psychosocial nature of the ego, that recruitment is not an appropriate focus. Consequently, instead of recruitment, I suggest that these results demonstrate the importance of focusing on a HT/Ps' continuing professional development. The ego can develop throughout adulthood (Manners and Durkin, 2000; Manners, Durkin and Nesdale, 2004; Vincent, Ward and Denson, 2013) and many have hypothesised on how AED can be promoted through different models of learning (Kegan and Lahey, 2009; Drago-Severson, 2014). Whilst some have called for these approaches to be more prominent in leadership development (Day et al., 2014) and, to a lesser extent within educational leadership (Drago-Severson, 2004; 2012) adult development remains an under-utilised tool within HT/P development programmes. Given the association between AED and the expectations and roles of the HT/P, this thesis supports calls for embedding adult development theories into the professional development of HT/Ps.

However, developing leaders in later stages of AED is only worthwhile if the context and environment can support individuals to work at these later stages. As a psychosocial construct,

context and the environment play a meaningful role within how the ego, and thus sense-making, is expressed. As noted in section 5.4.2, individuals can operate at earlier AED stage in response to unsupportive or stressful contextual demands. Hence, the capacity for working with others, handling complexity and comprehending wicked problems can be affected within these circumstances. In acknowledging that ego expression is related to context, and its subsequent role in a HT/Ps practice, AED theory can provide a psychological framework for comprehending influence of the wider environment in how HT/Ps lead and the possibility of individuals applying practices desired by theories of educational leadership.

This thesis has also made unique methodological contributions to the field. Prior to this thesis, there were few examples which qualitatively established themes on how different stages of AED manifest within leadership practice and the perspectives of those around them. I have developed a case study design which, using qualitative data and analysis, has produced greater nuance into the working practices of those in different AED stages. As well as demonstrating the potential of these approaches within the field, I hope I have provided a template which other researchers can enhance and develop further. Furthermore, this thesis introduces two new methods to this field of enquiry. The approach to triangulation through two different types of tasks is a novel approach which can enhance the credibility of themes being attributable to stage of AED. I have also developed an alternative approach to vignette design. Through a process I have called 'co-construction', practitioners had a greater role in the design of vignettes, which could increase the credibility of insights produced. The vignettes themselves, as wicked problems designed and validated by a diverse group of school leaders, are also an original contribution to the field which can support other researchers looking to study how HT/Ps interact with wicked problems.

Through a critical analysis of the studies limitations, I have produced a series of recommendations for future research. This study has been limited by a smaller sample size and being unable to identify individuals in the last most likely AED stage where adults could be expected to reside – the Autonomous stage. I suggested that the substantive differences found between stages justifies a larger study in this domain. A larger study would increase the likelihood of identifying those within the Autonomous stage and would offer the opportunity to robustly test the themes identified within this study. Furthermore, I have suggested how triangulating AED assessment with other methods could support future research efforts.

In conclusion, this thesis has offered unique conceptual and methodological contributions to the field of educational leadership. This thesis provides a novel and robust set of case studies of HT/Ps in

different AED stages. Through these case studies, I have highlighted the potential for AED to offer substantive insights into how HT/Ps lead their organisations, as well as its potential to explain and expand other theories of educational leadership. I have outlined how the findings of this study, in particular the overlap between later stages of AED and the expectations of leadership, could have consequences for how we conceptualise the role of the HT/P, their professional development and the role of context. I have also offered unique methodological contributions to the study of AED and sense-making within the practice of HT/Ps. Through this thesis, I have contributed unique data, insights and methods which begin to establish a new line of enquiry for educational leadership and the potentially central role of AED in understanding the practice of HT/Ps.

## Chapter 7 References

*Academies Act 2010*, c.32. London: TSO

Allen, N., Grigsby, B. and Peters, M.L., 2015. Does leadership matter? Examining the relationship among transformational leadership, school climate and student achievement. *International Journal of Educational Leadership Preparation*, 10(2), pp. 1-22.

Allen, R., Burgess, S., and McKenna, L. 2014. *School performance and parental choice of school: secondary data analysis*. TSO: London

Ancona, D., 2012. Sensemaking: framing and acting in the unknown

In: S. Snook, N. Nohria and R. Khurana, eds. *The Handbook for Teaching Leadership*. Thousand Oaks, CA.: SAGE, pp. 4-18.

Anderson, M., 2017. Transformational leadership in education: A review of existing literature.

*International Social Science Review* [Online], 93(1), Available from:

<https://digitalcommons.northgeorgia.edu/cgi/viewcontent.cgi?article=1213&context=issr> [Accessed 17th July 2020].

Armstrong, D., Armstrong, A.C., and Spandagou, I. 2011. Inclusion: by choice or by chance?

*International Journal of Inclusive Education*, 15, pp.29-39.

Armstrong, D., 2017. Wicked problems in special and inclusive education. *Journal of Research in Special Educational Needs*, 17(4), pp. 229-236.

Arnott, M. and Menter, I.A.N., 2007. The same but different? Post-devolution regulation and control in education in Scotland and England. *European Educational Research Journal*, 6(3), pp. 250-265.

Ashkanasy, N. and Humphrey, R., 2014. Leadership and emotion: A multi-level perspective. In: D.

Day, ed. *The Oxford Handbook of Leadership and Organisations*. Oxford: OUP, pp. 783-804.

Ayres, L., Kavanaugh, K. and Knafl, K.A., 2003. Within-Case and across-case approaches to qualitative data analysis. *Qualitative Health Research*, 13(6), pp. 871-883.

United Nations General Assembly, 1989. *Adoption of a Convention on the Rights of the Child*. New York, NY: United Nations.

Ball, S., 2008. *The Education Debate*. Bristol: Bristol University Press.

Barker, E.H. and Torbert, W., 2011. Generating and measuring practical differences in leadership performance at postconventional action logics. In: A.H. Pfaffenberger, P.W. Marko and A. Combs, eds. *The Postconventional Personality*. New York, NY: SUNY Press.

Baron, C. and Cayer, M., 2011. Fostering post-conventional consciousness in leaders: why and how? *Journal of Management Development*, 30(4), pp. 344-365.

Barrick, M.R. and Mount, M.K., 1991. The big five personality dimensions and job performance: a meta-analysis. *Personnel Psychology*, 44(1), pp. 1-26.

Barter, C. and Renold, E., 1999. The use of vignettes in qualitative research. *Social Research Update*, 25, pp.1-7

Bartone, P.T., Snook, S.A., Forsythe, G.B., Lewis, P. and Bullis, R.C., 2007. Psychosocial development and leader performance of military officer cadets. *The Leadership Quarterly*, 18(5), pp. 490-504.

Bartunek, J., Gordon, J. and Weathersby, R., 1983. Developing "complicated" understanding in administrators. *The Academy of Management Review*, 8(2), pp. 273.

Bass, B.M. and Bass, R., 2009. *The Bass Handbook of Leadership: Theory, Research, and Managerial Applications*. London: Free Press.

Basseches, M., 1980. Dialectical schemata. A framework for the empirical study of the development of dialectical thinking. *Human Development*, 23(6), p. 400-421.

Basseches, M., 1984. *Dialectical Thinking in Adult Development*. New York, NY: Ablex.

Bassey, M., 1999. *Case Study Research in Educational Settings*. Buckingham: Open University Press.

Bauer, J.J., Schwab, J.R. and McAdams, D.P., 2011. Self-actualizing: Where ego development finally feels good? *The Humanistic Psychologist*, 39(2), pp. 121-136.

Beatty, B.R., 2000. The emotions of educational leadership: breaking the silence. *International Journal of Leadership in Education*, 3(4), pp. 331-358.

Bell, M.A. and Wolfe, C.D., 2004. Emotion and cognition: An intricately bound developmental process. *Child Development*, 75(2), pp. 366-370.

Berger, J.G. and Atkins, P.W.B., 2009. Mapping complexity of mind: using the subject-object interview in coaching. *Coaching: An International Journal of Theory, Research and Practice*, 2(1), pp. 23-36.

Berkovich, I. and Eyal, O., 2015. Educational leaders and emotions: An international review of empirical evidence 1992–2012. *Review of Educational Research*, 85(1), pp. 129-167.

Biesta, G., Priestley, M. and Robinson, S., 2015. The role of beliefs in teacher agency. *Teachers and Teaching*, 21(6), pp. 624-640.

Blase, J. and Blase, J., 1999. Principals' Instructional Leadership and Teacher Development: Teachers' Perspectives. *Educational Administration Quarterly*, 35(3), pp. 349-378.

Blasi, A. 1976. Personal responsibility and ego development. In R. deCharms, ed. *Enhancing motivation: Change in the classroom*. New York, NY: Irvington, pp. 177-199

Blasi, A., 1993. The theory of ego development and the measure. *Psychological Inquiry*, 4(1), pp. 17-19.

Blasi, A. 1998. Loevinger's theory of ego development and its relationship to the cognitive-developmental approach. In: P.M. Westenberg, A. Blasi and L.D. Cohn, eds. *Personality Development: Theoretical, Empirical, and Clinical Investigations of Loevinger's Conception of Ego Development*. London: Psychology Press, pp.13-27.

Boiral, O., Baron, C and Gunnlaugson, O. 2014. Environmental leadership and consciousness development: A case study among Canadian SMEs. *Journal of Business Ethics*, 123, pp.363-383.

Bottery, M., 2016. *Educational Leadership for a More Sustainable World*. London: Bloomsbury.

Bovey, W.H. and Hede, A. 2001. Resistance to organisational change: the role of cognitive and affective processes. *Leadership and Organisational Development*, 22(8), pp.372-382.

Boyatzis, R. and McKee, A., 2006. Inspiring others through resonant leadership. *Business Strategy Review*, 17(2), pp. 15-19.

- Bracken, D.W., Rose, D.S. and Church, A.H., 2016. The evolution and devolution of 360 feedback. *Industrial and Organizational Psychology*, 9(4), pp.761-794.
- Bradbury-Jones, C., Taylor, J. and Herber, O.R., 2014. Vignette development and administration: a framework for protecting research participants. *International Journal of Social Research Methodology*, 17(4), pp. 427-440.
- Brinkmann, S., 2007. Could Interviews Be Epistemic?: An Alternative to Qualitative Opinion Polling. *Qualitative Inquiry*, 13(8), pp. 1116-1138.
- Brinkmann, S. and Kvale, S., 2015. *Interviews: Learning the Craft of Qualitative Research Interviewing*. 3rd ed. Thousand Oaks, CA.: SAGE.
- British Psychological Society, 2018. Code of Ethics and Conduct [Online]. Available at <https://www.bps.org.uk/news-and-policy/bps-code-ethics-and-conduct> [Accessed 25th April 2018].
- Brown, B.C., 2012. Leading complex change with post-conventional consciousness. *Journal of Organizational Change Management*, 25(4), pp. 560-575.
- Bryman, A., 2016. *Social Research Methods*. 5th ed. Oxford: Oxford University Press.
- Burns, J.M., 1978. *Leadership*. New York, NY.: Harper and Row.
- Bursik, K., 1991. Adaptation to divorce and ego development in adult women. *Journal of Personality and Social Psychology*, 60(2), pp. 300-306.
- Bush, T. and Jackson, D., 2002. A preparation for school leadership: International perspectives. *Educational Management and Administration*, 30(4), pp. 417-429.
- Bushe, G.R. and Gibbs, B.W., 1990. Predicting organization development consulting competence from the Myers-Briggs Type Indicator and stage of Ego Development. *The Journal of Applied Behavioral Science*, 26(3), pp. 337-357.
- Butterfield, L.D., Borgen, W.A., Amundson, N.E. and Maglio, A.-S.T., 2005. Fifty years of the critical incident technique: 1954-2004 and beyond. *Qualitative Research*, 5(4), pp. 475-497.



- Butterfield, L.D., Borgen, W.A., Maglio, A.-S.T. and Amundson, N.E., 2009. Using the enhanced critical incident technique in counselling psychology research. *Canadian Journal of Counselling*, 43(4), pp. 265-282.
- Camillus, J., 2008. Strategy as a wicked problem. *Harvard Business Review*, 86(5), pp. 98-106.
- Carlozzi, A.F., Gaa, J.P. and Liberman, D.B., 1983. Empathy and ego development. *Journal of Counselling Psychology*, 30(1), pp. 113-116.
- Carlson, V., and Westenberg, P.M. 1998. Cross-Cultural Applications of the WUSCT. In: J. Loevinger, ed. *Technical Foundations for Measuring Ego Development: The Washington University Sentence Completion Test*. Mahwah, N.J: Psychology Press, pp.57-75.
- Carr, S, Gilbride N.M., and James, C., 2016. The ego development of schools leaders and its implications for practice; unlocking school leadership potential, *British Educational Leadership Management and Administration Society Annual Conference*, 8th-10th July 2016, Cheshire, UK.
- Carr, S., Gilbride, N.M., James, C. 2017. School principals: their adult ego development stage, their sense-making capabilities and how others experience them, *American Education Research Association*, 27th April-1st May 2017, San Antonio, Texas.
- Chell, E., 1998. Critical incident technique. In: G. Symon and C. Cassell, eds. *Qualitative Methods and Analysis in Organizational Research: A Practical Guide*. London: SAGE, pp. 51-72.
- Chin, J., 2003. Reconceptualizing administrative preparation of principals: Epistemological issues and perspectives. In: P. Hallinger, ed. *Reshaping the Landscape of School Leadership Development*. Lisse, Netherlands: Swets and Zeitlinger, pp. 69-84.
- Clark, J.A., 2006. Social justice, education and schooling: Some philosophical issues. *British Journal of Educational Studies*, 54(3), pp. 272-287.
- Clarke, V., Braun, V. and Hayfield, N., 2015. Themantic analysis. In: J.A. Smith, ed. *Qualitative Psychology*. London: SAGE, pp. 222-249.
- Cliffe, J., 2011. Emotional intelligence: A study of female secondary school headteachers. *Educational Management Administration and Leadership*, 39(2), pp. 205-218.

- Clore, G.L. and Ortony, A., 2000. Cognition in emotion: Always, sometimes, or never. *Cognitive Neuroscience of Emotion*, pp. 24-61.
- Coe, C.K., 1992. The MBTI: Potential uses and misuses in personnel administration. *Public Personnel Management*, 21(4), pp. 511-522.
- Cohen, L. and Manion, L., 1986. *Research Methods in Education*. London: Croom Helm.
- Cohen, L., Manion, L., and Morrison, K. 2007. *Research Methods in Education*. 6th ed. London: Routledge Taylor and Francis.
- Cohn, L. 1998. Age trends in personality development: A quantitative review. In: P.M. Westenberg, A. Blasi and L.D. Cohn, eds. *Personality Development: Theoretical, Empirical, and Clinical Investigations of Loevinger's Conception of Ego Development*. London: Psychology Press, pp.133-143.
- Cohn, L.D. and Westenberg, P.M., 2004. Intelligence and maturity: Meta-analytic evidence for the incremental and discriminant validity of Loevinger's measure of ego development. *Journal of Personality and Social Psychology*, 86(5), p. 760-772.
- Collett, J.L. and Childs, E., 2011. Minding the gap: Meaning, affect, and the potential shortcomings of vignettes. *Social Science Research*, 40(2), pp. 513-522.
- Connolly, M., James, C. and Fertig, M., 2017. The difference between educational management and educational leadership and the importance of educational responsibility. *Educational Management Administration and Leadership*, 20(10), pp. 1-16.
- Cook-Greuter, S. R., 1999. Postautonomous ego development: A study of its nature and measurement. Thesis (PhD). Harvard University.
- Cook-Greuter, S.R., 2004. Making the case for a developmental perspective. *Industrial and Commercial Training*, 36(6/7), pp. 275-281.
- Cook-Greuter, S.R., 2011. A report from the scoring trenches. In: A.H. Pfaffenberger, P.W. Marko and A. Combs, eds. *The Postconventional Personality*. New York, NY: SUNY Press, pp. 57-75.
- Corbin, J.M., and Strauss, A. 2008. *Basics of qualitative research: techniques and procedures for developing grounded theory*. 3rd ed. London: SAGE.

Costa, P.T. and McCrae, R.R., 1993. Ego development and trait models of personality. *Psychological Inquiry*, 4(1), pp. 20-23.

Crawford, M., 2009. *Getting to the heart of leadership: Emotion and educational leadership*. London: SAGE.

Cuban, L. 1988. *The Managerial Imperative and the Practice of Leadership in Schools*, New York, NY: State University of New York Press.

Cummings, A.L. and Murray, H.G., 1989. Ego development and its relation to teacher education. *Teaching and Teacher Education*, 5(1), pp. 21-32.

Dabos, G.E. and Rousseau, D.M., 2004. Mutuality and reciprocity in the psychological contracts of employees and employers. *Journal of Applied Psychology*, 89(1), pp. 52-72.

*Data Protection Act 2018*, c. 12. TSO: London

Day, C., Gu, Q. and Sammons, P., 2016. The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational Administration Quarterly*, 52(2), pp. 221-258.

Day, D.V., Fleenor, J.W., Atwater, L.E., Sturm, R.E. and McKee, R.A., 2014. Advances in leader and leadership development: A review of 25 years of research and theory. *The Leadership Quarterly*, 25(1), pp. 63-82.

Dematthews, D.E. and Serafini, A., 2019. Do good principals do bad things? Examining bounds of ethical behavior in the context of high-stakes accountability. *Leadership and Policy in Schools*, pp. 1-20.

Dooley, K.J., 1997. A complex adaptive systems model of organization change. *Nonlinear Dynamics, Psychology, and Life Sciences*, 1(1), pp. 69-97.

Drago-Severson, E., 2004. *Helping Teachers Learn: Principal Leadership for Adult Growth and Development*. Thousands Oaks, CA: Corwin Press.

Drago-Severson, E., 2012. *Helping Educators Grow*. Cambridge, MA: Harvard University Press.

- Drago-Severson, E. and Blum-DeStefano, J., 2014. Leadership for transformational learning: A developmental approach to supporting leaders' thinking and practice. *Journal of Research on Leadership Education*, 9(2), pp. 113-141.
- Earley, P. and Bubb, S., 2013. A day in the life of new headteachers: Learning from observation. *Educational Management Administration and Leadership*, 41(6), pp. 782-799.
- Edvardsson, B., 1992. Service breakdowns: A study of critical incidents in an airline. *International Journal of Service Industry Management*, 3(4), pp. 17-29.
- Edvardsson, B. and Roos, I., 2001. Critical incident techniques: Towards a framework for analysing the criticality of critical incidents. *International Journal of Service Industry Management*, 12(3), pp. 251-268.
- European Parliament and Council of European Union. 2016. *Regulation (EU) 2016/679* [Online]. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679&from=EN> [Accessed: 2 February 2017].
- Erikson, E.H. (1956). The problem of ego identity. *Journal of the American Psychoanalytic Association*, 4(1), pp.56-121
- Evans, F., 1996. *Harry Stack Sullivan: Interpersonal Theory and Psychiatry*. London: Routledge.
- Finch, J., 1987. The vignette technique in survey research. *Sociology*, 21(1), pp. 105-114.
- Firestone, W.A., 1993. Alternative arguments for generalizing from data as applied to qualitative research. *Educational Researcher*, 22(4), pp. 16-23.
- Fisher, D. and Torbert, W., 1991. Transforming managerial practice: Beyond the achiever stage. *Research in Organizational Change and Development*, 5, pp. 143-173.
- Field, A. 2017. *Discovering Statistics Using IBM SPSS Statistics*. 5th ed. London: SAGE.
- Fisher, D., Rooke, D., and Torbert, B. 2003. *Personal and Organisational Transformations through Action Inquiry*. Boston, MA: Edge/Work Press.

Fivush, R., Reese, E. and Booker, J.A., 2019. Developmental Foundations of the Narrative Author in Early Mother–Child Reminiscing. In D. McAdams, R. Shiner, & J. Tackett, eds. *Handbook of personality development*. New York, NY: Guilford Press., pp.399-417.

Flanagan, J.C., 1954. The critical incident technique. *Psychological Bulletin*, 51(4), pp. 327-358.

Fore, H.H., Dongyu, Q., Beasley, D.M. and Ghebreyesus, T.A., Child malnutrition and COVID-19: the time to act is now. *The Lancet*, 396, pp. 517-518

Education Endowment Foundation, 2020. *Impact of School Closures on the Attainment Gap: Rapid Evidence Assessment* [Online]. Available from: [https://educationendowmentfoundation.org.uk/public/files/EEF\\_\(2020\)\\_-\\_Impact\\_of\\_School\\_Closures\\_on\\_the\\_Attainment\\_Gap.pdf](https://educationendowmentfoundation.org.uk/public/files/EEF_(2020)_-_Impact_of_School_Closures_on_the_Attainment_Gap.pdf) [Accessed 15 July 2020].

Freud, S., 1961. *The Standard Edition of the Complete Psychological Works of Sigmund Freud. Vol. 19, (1923-1925), The Ego and the Id and Other works*. London: Hogarth Press

Frijda, N.H., 2004. Emotions and action. In A. S. R. Manstead, N. Frijda, and A. Fischer, eds. *Feelings and Emotions: The Amsterdam Symposium*. Cambridge: Cambridge University Press, pp. 158-173.

Fullan, M. and Hargreaves, A., 1996. *What's Worth Fighting For In Your School*. New York, NY: Teachers College Press.

Geertz, C. 1973. Thick description: Toward an interpretive theory of culture. In Y. S. Lincoln & N. K. Denzin, eds. *Turning points in qualitative research: Tying knots in a handkerchief*. Walnut Creek, CA: AltaMira Press, pp. 143–68.

George, J.M., 2000. Emotions and leadership: The role of emotional intelligence. *Human Relations*, 53(8), pp. 1027-1055.

Gibbons, S., Machin, S. and Silva, O., 2008. Choice, competition and pupil achievement. *Journal of the European Economic Association*, 6(4), pp. 912-947.

Gilbride, N.M. and James, C., 2016. The ego development of school leaders and its implications for practice. *European Society for Research in Adult Development Symposium*, 25<sup>th</sup>-27<sup>th</sup> May 2016, The Hauge, Netherlands.

Gilbride, N.M., James, C., and Carr., S. 2018. Adult ego development and school leadership practice. *European Society for Research in Adult Development Symposium*, 25<sup>th</sup>-27<sup>th</sup> May 2018, London.

Gilbride, N.M. and James, C., 2018 The ego development of schools leaders and its implications for sustainable leadership. *British Educational Leadership Management and Administration Annual Conference*, 6<sup>th</sup>-8<sup>th</sup> July 2018, London.

Gilbride, N.M., James, C. and Carr, S., 2020. School principals at different stages of adult ego development: Their sense-making capabilities and how others experience them. *Educational Management Administration and Leadership* [Online]. Available from: <https://journals.sagepub.com/doi/abs/10.1177/1741143220903724> [Accessed 21st February 2020].

Gilmore, J.M. and Durkin, K., 2001. A critical review of the validity of ego development theory and its measurement. *Journal of Personality Assessment*, 77(3), pp. 541-567.

Goleman, D., Boyatzis, R. and McKee, A., 2013. *Primal Leadership: Unleashing the Power of Emotional Intelligence*. Brighton, MA: Harvard Business Review Press.

Gorard, S. and Siddiqui, N., 2019. How trajectories of disadvantage help explain school attainment. *SAGE Open* [Online], 9(1). Available from: <https://journals.sagepub.com/doi/10.1177/2158244018825171> [Accessed 21st July 2020].

Gould, D., 1996. Using vignettes to collect data for nursing research studies: how valid are the findings? *Journal of clinical nursing*, 5(4), pp. 207-212.

GOV.UK, 2020. *Find and compare schools in England* [Online]. Available from: <https://www.gov.uk/school-performance-tables> [Accessed 15th February 2020].

Greatbatch, D. and Tate, S. 2019. *What works in delivering school improvement through school to school support*. TSO: London.

Great Britain. Department for Education, *Find and Compare Schools in England* [Online]. Available from: <https://www.gov.uk/school-performance-tables> [Accessed 10th October 2020].

Great Britain. Department for Education, 2011. *Teacher Standards*. TSO: London.

Great Britain. Department for Education, 2015. *National standards of excellence for headteachers*. TSO: London

Great Britain. Department for Education, 2017. NPQ quality framework: a guide for participants. TSO: London.

Great Britain. Department for Education, 2019. *Initial Teacher Training: Accreditation and Support* [Online]. Available from: <https://www.gov.uk/guidance/initial-teacher-training-itt-accreditation> [Accessed 20th July 2020].

Great Britain. Department for Education, 2020a. *Guidance for Schools: coronavirus* [Online]. Online. Available from: <https://www.gov.uk/government/collections/guidance-for-schools-coronavirus-covid-19> [Accessed 15th July 2020].

Great Britain. Department for Education, 2020b. *Teaching Schools and System Leaders* [Online]. [Accessed 1<sup>st</sup> July 2020].

Great Britain. Department for Education. 2020c, *National Funding Formula for Schools and High Needs: 2020-2021*. TSO: London

Grint, K., 2005. Problems, problems, problems: The social construction of 'leadership'. *Human Relations*, 58(11), pp. 1467-1494.

Grint, K., 2010. Wicked problems and clumsy solutions: the role of leadership. In: S. Brookes and K. Grint, eds. *The New Public Leadership Challenge*. Basingstoke: Palgrave Macmillan, pp. 169–186.

Gronn, P., 2002. Distributed leadership as a unit of analysis. *The Leadership Quarterly*, 13(4), pp. 423-451.

Hallinger, P., 2003. Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education*, 33(3), pp. 329-352.

Hallinger, P., 2005. Instructional leadership and the school principal: A passing fancy that refuses to fade away. *Leadership and Policy in Schools*, 4(3), pp. 221-239.

Hallinger, P. and Heck, R.H. 2010. Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. *School Leadership and Management*, 30(2), pp.95-110.

Hallinger, P., 2018. Bringing context out of the shadows of leadership. *Educational Management Administration and Leadership*, 46(1), pp. 5-24.

Hampshire, A., Highfield, R.R., Parkin, B.L. and Owen, A.M., 2012. Fractionating human intelligence. *Neuron*, 76(6), pp. 1225-1237.

Hancock, D., 2010. *Tame, Messy and Wicked Risk Leadership*. Farnham: Gower.

Hampshire, A., Highfield, R.R., Parkin, B.L. and Owen, A.M., 2012. Fractionating human intelligence. *Neuron*, 76(6), pp.1225-1237.

Hargreaves, A. and Fink, D., 2004. The seven principles of sustainable leadership. *Educational Leadership*, 61(7), pp. 8-13.

Hargreaves, A. and O'Connor, M.T., 2018. Solidarity with solidity: The case for collaborative professionalism. *Phi Delta Kappan*, 100(1), pp. 20-24.

Harms, P.D. and Crede, M., 2010. Emotional intelligence and transformational and transactional leadership: A meta-analysis. *Journal of Leadership and Organizational Studies*, 17(1), pp. 5-17.

Harney A, P., 2020. The Meaning-making structures of outstanding leaders: An examination of conative capability at postconventional ego development levels. In: R. Jonathan, ed. *Maturing Leadership: How Adult Development Impacts Leadership*. Bingley: Emerald Publishing, pp. 191-216.

Harris, A., 2003. Teacher leadership as distributed leadership: heresy, fantasy or possibility? *School Leadership and Management*, 23(3), pp. 313-324.

Harris, A., 2008. Distributed leadership: according to the evidence. *Journal of Educational Administration*, 46(2), pp. 172-188.

Harris, L.S. and Kuhnert, K.W., 2008. Looking through the lens of leadership: a constructive developmental approach. *Leadership and Organization Development Journal*, 29(1), pp. 47-67.



- Haslam, S.A., 2003. *Research Methods and Statistics in Psychology*. 2nd ed. London: SAGE.
- Hauser, S.T. 1976. Loevinger's model and a measure of ego development: A critical review, *Psychological Bulletin*, 83(5), pp. 928–955.
- Hauser, S.T., 1993. Loevinger's model and measure of ego development: A Critical Review, II. *Psychological Inquiry*, 4(1), pp. 23-31.
- Hawkins, M. and James, C., 2018. Developing a perspective on schools as complex, evolving, loosely linking systems, *Educational Management Administration and Leadership*, 46(5), pp. 729-748.
- Head, B.W., 2010. How can the public sector resolve complex issues? *Asia-Pacific Journal of Business Administration*, 2(1), pp. 8-16.
- Healy, M. and Perry, C., 2000. Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research: An International Journal*, 3(3), pp. 118-126.
- Heck, R.H. and Hallinger, P. 2009. Assessing the Contribution of Distributed Leadership to School Improvement and Growth in Math Achievement. *American Educational Research Journal*, 46(3), pp.659-689.
- Heck, R.H. and Hallinger, P., 2014. Modelling the longitudinal effects of school leadership on teaching and learning. *Journal of Educational Administration*, 52(5), pp. 653-681.
- Riess, H., 2017. The science of empathy. *Journal of Patient Experience*, 4(2), pp.74-77.
- Helsing, D. and Howell, A., 2014. Understanding Leadership from the inside out: Assessing leadership potential using constructive-developmental theory. *Journal of Management Inquiry*, 23(2), pp. 186-204.
- Helson, R. and Roberts, B.W., 1994. Ego development and personality change in adulthood. *Journal of Personality and Social Psychology*, 66(5), pp. 911-920.
- Herzberg, F., Mausner, B., & Snyderman B. (1959). *The motivation to work*. New York: Wiley

- Hitlin, S., Andersson, M.A. and Elder, G.H., 2015. Motivation: life course and sociological perspectives. In: J.D. Wright, ed. *International Encyclopaedia of the Social and Behavioral Sciences (Second Edition)*. Oxford: Elsevier, pp. 940-945.
- Hmelo, C.E., Holton, D.L. and Kolodner, J.L., 2000. Designing to learn about complex systems. *The Journal of the Learning Sciences*, 9(3), pp.247-298.
- Hmelo-Silver, C.E. and Azevedo, R., 2006. Understanding complex systems: Some core challenges. *The Journal of the Learning Sciences*, 15(1), pp.53-61.
- Holland, J.H., 1992. Complex adaptive systems. *Daedalus*, 121(1), pp. 17-30.
- Holland, J.H., 2006. Studying complex adaptive systems. *Journal of Systems Science and Complexity*, 19(1), pp. 1-8.
- Holt, R. and Cornelissen, J., 2014. Sensemaking revisited. *Management Learning*, 45(5), pp. 525-539.
- Hope, L., Mullis, R. and Gabbert, F., 2013. Who? What? When? Using a timeline technique to facilitate recall of a complex event. *Journal of Applied Research in Memory and Cognition*, 2(1), pp. 20-24.
- Huber, S.G., 2004. School leadership and leadership development: Adjusting leadership theories and development programs to values and the core purpose of school. *Journal of Educational Administration*, 42(6), pp. 669-684.
- Hughes, R. and Huby, M., 2004. The construction and interpretation of vignettes in social research. *Social Work and Social Sciences Review*, 11(1), pp. 36-51.
- Hughes, H., 2007. Critical incident technique. In: S. Lipu, K. Williamson and A. Lloyd, eds. *Exploring Methods in Information Literacy Research*. Cambridge: Chandos Publishing, pp. 49-66.
- Hy, L.X. and Loevinger, J., 1996. *Measuring Ego Development*. 2nd ed. Mahwah, N.J: Erlbaum.
- Hy, L.X, Bobbitt, K., and Loevinger, J. 1998. Testing and Revising the Rules for Obtaining TPRs for 36-Item and 18-Item Forms. In J. Loevinger, ed. *Technical Foundations for Measuring Ego Development: the Washington University Sentence Completion Test*. Mahwah, N.J: Psychology Press, pp.

Isenbarger, L. and Zembylas, M., 2006. The emotional labour of caring in teaching. *Teaching and Teacher Education*, 22(1), pp. 120-134.

James, C. and Vince, R., 2001. Developing the leadership capability of headteachers. *Educational Management and Administration*, 29(3), pp. 307-317.

James, C., 2010. The psychodynamics of educational change. In: A. Hargreaves, A. Lieberman, M. Fullan and D. Hopkins., eds. *Second International Handbook of Educational Change*. Dordrecht: Springer.

James, C. and Crawford, M., 2014. The case for an affective paradigm in social and organisational research. In: C. Clarke, M. Brossine and L. Watts, eds. *Researching with Feeling: The Emotional Aspects of Social and Organizational Research*. London: Routledge, pp. 147-163.

James, C., James, J. and Potter, I., 2017. An exploration of the validity and potential of adult ego development for enhancing understandings of school leadership. *School Leadership and Management*, 37(4), pp. 372-390.

James, C., Crawford, M. and Oplatka, I., 2018. An affective paradigm for educational leadership theory and practice: connecting affect, actions, power and influence. *International Journal of Leadership in Education*, 22(5), pp. 617-628

James, C., 2019. Integrative Leadership. *British Educational Leadership Management and Administration Annual Conference*, 12th-14th July 2019, Leicestershire.

Jespersen, K., Kroger, J. and Martinussen, M., 2013. Identity status and ego development: A meta-analysis. *Identity: Meta-Analytic Studies of Identity Status and Personality*, 13(3), pp. 228-241.

Jobe, J., 2003. Cognitive psychology and self-reports: Models and methods. *Quality of Life Research*, 12(3), pp. 219-227.

John, O.P., Pals, J.L. and Westenberg, P.M., 1998. Personality prototypes and ego development: Conceptual similarities and relations in adult women. *Journal of Personality and Social Psychology*, 74(4), p. 1093.

Johnson, S., 2005. The experience of work-related stress across occupations. *Journal of Managerial Psychology*, 20(2), pp. 178-188.

Johnson, S. and Rasulova, S., 2016. Qualitative impact evaluation: Incorporating authenticity into the assessment of rigour. *Bath Papers in International Development and Wellbeing* [Online], 45. Available from: <http://www.bath.ac.uk/cds/publications/bpd45.pdf>. [Accessed 4<sup>th</sup> August 2019].

Joiner, B. and Josephs, S., 2007. Developing agile leaders. *Industrial and Commercial Training*, 39(1), pp. 35-42.

Joiner, B., 2011. Leadership and post conventional stages of development. In: A.H. Pfaffenberger, P.W. Marko and A. Combs, eds. *The Postconventional Personality*. New York: SUNY Press, pp. 133-153.

Jolliffe, I.T. and Cadima, J., 2016. Principal component analysis: a review and recent developments. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* [Online], 374, Available from: <https://royalsocietypublishing.org/doi/pdf/10.1098/rsta.2015.0202>. [Accessed 2<sup>nd</sup> February 2018].

Kegan, R., 1982. *The Evolving Self: Problem and Process in Human Development*. Cambridge, MA: Harvard University Press.

Kegan, R., 1994. *In Over Our Heads: The Mental Demands of Modern Life*. Cambridge, MA: Harvard University Press.

Kegan, R. and Lahey, L., 2009. *Immunity to Change*. Boston, MA: Harvard Business Press.

Kelchtermans, G., Piot, L., Ballet, K. 2011. The lucid loneliness of the gatekeeper: exploring the emotional dimension in principals' work lives. *Oxford Review of Education*, 37(1), pp. 93-109.

Keltner, D., Gruenfeld, D.H. and Anderson, C., 2003. Power, approach, and inhibition. *Psychological Review*, 110(2), pp. 265-284.

Kemp, S., 2009. Unpredictability and nonlinearity in complexity theory: A critical appraisal. *Emergence : Complexity and Organization*, 11(1), pp. 84-93.

King, L.A., Scollon, C.K., Ramsey, C. and Williams, T., 2000. Stories of life transition: Subjective well-being and ego development in parents of children with Down Syndrome. *Journal of Research in Personality*, 34(4), pp. 509-536.

- Kirkland, E. and Bauer, S., 2016. Are leaders influenced by advocates in the special education eligibility decision? *International Journal of Education Policy and Leadership*, 11(2), pp.1-16.
- Kirschner, P., Sweller, J. and Clark, R., 2006. Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential and inquiry-based teaching. *Educational Psychologist*, 41(2), pp.75-86.
- Klar, H.W., Huggins, K.S., Hammonds, H.L. and Buskey, F.C., 2016. Fostering the capacity for distributed leadership: a post-heroic approach to leading school improvement. *International Journal of Leadership in Education*, 19(2), pp. 111-137.
- Knutson, K.M., Krueger, F., Koenigs, M., Hawley, A., Escobedo, J.R., Vasudeva, V., Adolphs, R. and Grafman, J., 2010. Behavioral norms for condensed moral vignettes. *Social Cognitive and Affective Neuroscience*, 5(4), pp. 378-384.
- Kohlberg, L., 1984. *The psychology of moral development: the nature and validity of moral stages*. London: Harper and Row.
- Krettenauer, T., 2011. The issue of the highest stages in structural-developmental theories. In: A.H. Pfaffenberger, P.W. Marko and A. Combs, eds. *The Postconventional Personality*. New York: SUNY Press, pp. 75-87.
- Kvale, S., 2007. *Doing Interviews*. London: SAGE.
- Labouvie-Vief, G., Devoe, M. and Bulka, D., 1989. Speaking about feelings: Conceptions of Emotion Across the Life Span. *Psychology and Aging*, 4(4), pp. 425-437.
- Lahey, L., Souvaine, E., Kegan, R., Goodman, R. and Felix, S., 2011. *A Guide to the Subject-object Interview: Its Administration and Interpretation*. Cambridge, MA: Harvard University.
- Lane, R.D., Quinlan, D.M., Schwartz, G.E., Walker, P.A. and Zeitlin, S.B., 1990. The levels of emotional awareness scale: A cognitive-developmental measure of emotion. *Journal of Personality Assessment*, 55(1/2), pp. 124-135.
- Lanning, K., Pauletti, R.E., King, L.A. and McAdams, D.P., 2018. Personality development through natural language. *Nature Human Behaviour*, 2(5), pp. 327-334.

Laske, O., 2003. Executive development as adult development. In: J. Demick, ed. *Handbook of Adult Development*. New York, NY: Plenum/Kluwer.

Lassila, E. T., Timonen, V., Uitto, M., and Estola, E. 2017. Storied emotional distances in the relationships between beginning teachers and school principals. *British Educational Research Journal*, 43(3), pp. 486-505.

Lee, J., 2020. Mental health effects of school closures during COVID-19. *The Lancet Child and Adolescent Health*, 4(6), p. 421.

Lee, K., Ashton, M.C. and de Vries, R.E., 2005. Predicting workplace delinquency and integrity with the HEXACO and Five-Factor Models of personality structure. *Human Performance*, 18(2), pp. 179-197.

Lee, L. and Snarey, J., 1988. The relationship between ego and moral development: A theoretical review and empirical analysis. In: D.K. Lapsley and F.C. Power, eds. *Self, Ego and Identity: Integrative Approaches*. New York, NY: Springer, pp.151-179.

Leithwood, K., Begley, P.T. and Cousins, B., 1994. *Developing Expert Leadership for Future Schools*. London: Falmer Press

Leithwood, K., Jantzi, D. and Steinbach, R. 1999. *Changing Leadership for Changing Times*, Buckingham, Open University Press.

Levine, S.L., 1989. *Promoting Adult Growth in Schools: The Promise of Professional Development*. London: Allyn and Bacon.

Lewin, R., 2000. *Complexity: Life at the Edge of Chaos*. Chicago, IL: University of Chicago Press.

Liden, R.C., Anand, S. and Vidyaarhi, P., 2016. Dyadic relationships. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), pp. 139-166.

Lilgendahl, J.P., Helson, R. and John, O.P., 2013. Does ego development increase during midlife? The effects of openness and accommodative processing of difficult events. *Journal of Personality*, 81(4), pp. 403-416.

Lincoln, Y., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage

Loevinger, J., 1966. The meaning and measurement of ego development. *American Psychologist*, 21(3), pp. 195-206.

Loevinger, J., 1976. *Ego development*. San Francisco, CA: Jossey-Bass.

Loevinger, J., 1979. Construct validity of the sentence completion test of ego development. *Applied Psychological Measurement*, 3(3), pp. 281-311.

Loevinger, J., Cohn, L. D., Bonneville, L. P., Redmore, C. D., Streich, D. D., & Sargent, M. 1985. Ego development in college. *Journal of Personality and Social Psychology*, 48, pp. 947–962.

Loevinger, J., 1985. Revision of the sentence completion test for ego development. *Journal of Personality and Social Psychology*, 48(2), p. 420.

Loevinger, J., 1987. *Paradigms of Personality*. Oxford: W.H. Freeman

Loevinger, J., 1998. History of the sentence completion test (SCT) for ego development. In J. Loevinger, ed. *Technical Foundations for Measuring Ego Development: The Washington University Sentence Completion Test*. Mahwah, N.J: Psychology Press, p.1-11

Loevinger, J., 1998b. Reliability and Validity of the SCT. In: J. Loevinger, ed. *Technical Foundations for Measuring Ego Development: The Washington University Sentence Completion Test*. Mahwah, N.J: Psychology Press, pp.29-41.

Loevinger, J., 1998c. The Place of the WUSCT for Ego Development in Personality Measurement. In: J. Loevinger, ed. *Technical Foundations for Measuring Ego Development: The Washington University Sentence Completion Test*. Mahwah, N.J: Psychology Press, pp.77-81.

Loevinger, J., Cohn, L.D., Bonneville, L.P., Redmore, C.D., Streich, D.D. and Sargent, M., 1985. Ego development in college. *Journal of Personality and Social Psychology*, 48(4), pp. 947-962

Loevinger, J. and Wessler, R., 1970. *Measuring Ego Development*. San Francisco, CA: Jossey-Bass.

Lord, W., 2007. Psychometrics: the link between recruitment and development. *Development and Learning in Organizations: An International Journal*, 21(4), pp.29-33.

Maitlis, S. and Christianson, M., 2014. Sensemaking in organizations: Taking stock and moving forward. *The academy of management annals*, 8(1), pp. 57-125.

Manners, J. and Durkin, K., 2000. Processes involved in adult ego development: A conceptual framework. *Developmental Review*, 20(4), pp. 475-513.

Manners, J and Durkin, K. 2000. A critical review of the validity of ego development theory and its measurement. *Journal of Personality Assessment*, 77(3), pp. 541-567.

Manners, J., Durkin, K. and Nesdale, A., 2004. Promoting advanced ego development among adults. *Journal of adult development*, 11(1), pp. 19-27.

Markovits, H., 2013. The development of abstract conditional reasoning. In: P. Barrouillet and C. Gauffroy, eds. *The Development of Thinking and Reasoning*. 1st ed. London: Psychology Press.

*Marriage (Same Sex Couples) Act 2013*, c.30. London: TSO

Mason, M., 2008. What is complexity theory and what are its implications for educational change? *Educational Philosophy and Theory*, 40(1), pp. 35-49.

Matsuno, E. and Budge, S.L., 2017. Non-binary/Genderqueer Identities: A critical review of the literature. *Current sexual health reports*, 9(3), pp. 116-120.

Maxwell, J., 2012. *A Realist Approach for Qualitative Research*. Thousand Oaks, CA.: SAGE.

Maxwell, J. and Mittapalli, K., 2010. Realism as a stance for mixed methods research. In: A. Tashakkori and C. Teddlie, eds. *SAGE Handbook of Mixed Methods in Social and Behavioral Research*. Thousand Oaks, CA: SAGE, pp. 145–168.

Mayer, J.D. and Salovey, P., 1995. Emotional intelligence and the construction and regulation of feelings. *Applied and Preventive Psychology*, 4(3), pp. 197-208.

Mayer, J.D., Salovey, P. and Caruso, D., 2000. Models of emotional intelligence. In: R.J. Sternberg, ed. *The Handbook of Intelligence*. New York, NY: Cambridge University Press, pp. 396-420.



McAdams, D. P., Ruetzel, K., & Foley, J. M. 1986. Complexity and generativity at mid-life: Relations among social motives, ego development, and adults' plans for the future. *Journal of Personality and Social Psychology*, 50(4), pp.800-807.

McAdams, D.P., 1992. The five-factor model in personality: A critical appraisal. *Journal of personality*, 60(2), pp. 329-361.

McAdams, D.P., 1998. Ego, Trait, Identity. In: P.M. Westenberg, A.Biasi and L.D.Cohn, eds. *Personality development: Theoretical, Empirical, and Clinical Investigations of Loevinger's Conception of Ego Development*. London: Psychology Press, pp.27—38.

McAdams, D.P., 2008. *The person: An Introduction to the Science of Personality Psychology*. 5th ed. New York, NY: John Wiley and Sons.

McAdams, D.P., 2015. *The Art and Science of Personality Development*. New York, NY: Guilford Publications.

McCauley, C.D., Drath, W.H., Palus, C.J., O'Connor, P.M.G. and Baker, B.A., 2006. The use of constructive-developmental theory to advance the understanding of leadership. *The Leadership Quarterly*, 17(6), pp. 634-653.

McCrae, R. R., & Costa, P. T. 1980. Openness to experience and ego level in Loevinger's Sentence Completion Test: Dispositional contributions to developmental models of personality. *Journal of Personality and Social Psychology*, 39, pp. 1179–1190.

McDonald, J.D., 2008. Measuring personality constructs: The advantages and disadvantages of self-reports, informant reports and behavioural assessments. *Enquire*, 1(1), pp.1-19.

McLaughlin, M.W. and Talbert, J.E., 2001. *Professional communities and the work of high school teaching*. Chicago, IL: University of Chicago Press.

Mertens, D., 2019. *Research and Evaluation in Education and Psychology*. London: SAGE

Neisser, U., Boodoo, G., Bouchard, T.J., Boykin, A.W., Brody, N., Ceci, S.J., Halpern, D.,F., Loehlin, J.C., Perloff, R., Sternberg, R.J., and Urbina, S. 1996. Intelligence: Known and Unknowns. *American Psychologist*, 51(2), pp77-101.

Merron, K., Fisher, D. and Torbert, W.R., 1987. Meaning making and management action. *Group and Organization Management*, 12(3), pp. 274-286.

Michael, J. 2003. Using the Myers-Briggs type indicator as a tool for leadership development? Apply with caution. *Journal of Leadership & Organizational Studies*, 10(1), pp.68-81.

Miles, M.B. and Huberman, A.M., 1994. *Qualitative data analysis: an expanded sourcebook*. 2<sup>nd</sup> ed. London: SAGE.

Miles, M.B., Huberman, A.M. and Saldana, J., 2014. *Qualitative data analysis: a methods sourcebook*. 3rd ed: Los Angeles, CA: SAGE.

Miller, M., 2007. Transformational leadership and mutuality. *Transformation*, 24(3/4), pp. 180-192.

Mills, A.J., Durepos, G. and Wiebe, E., 2010. *Encyclopedia of case study research*. London: SAGE.

Mitleton-Kelly, E., 2003. *Complex systems and evolutionary perspectives on organisations: the application of complexity theory to organisations*. Oxford: Elsevier.

Morrison, K., 2002. *School leadership and complexity theory*. London: Routledge Falmer.

Morrison, K., 2010. Complexity Theory, school leadership and management: Questions for theory and practice. *Educational Management Administration and Leadership*, 38(3), pp. 374-393.

Murgatroyd, S., 2010. 'Wicked problems' and the work of the school. *European Journal of Education*, 45(2), pp. 259-279.

Murphy, J., 2002. Reculturing the profession of educational leadership: New blueprints. *Educational Administration Quarterly*, 38(2), pp. 176-191.

National College for Leadership of Schools and Childrens Services, 2010. *Executive Heads*. Nottingham.

Nederhof, A.J., 1985. Methods of coping with social desirability bias: A review. *European Journal of Social Psychology*, 15(3), pp. 263-280.

- Newell, C. and Bain, A., 2018. Defining Collaboration and Previewing Success Factors for Effective Collaboration. *Team-Based Collaboration in Higher Education Learning and Teaching*. Springer, pp. 9-27.
- Newman, D.L., Tellegen, A. and Bouchard, T.J., 1998. Individual Differences in Adult Ego Development: Sources of Influence in Twins Reared Apart. *Journal of Personality and Social Psychology*, 74(4), pp. 985-995.
- Nisbet, J. and Watt, J., 1984. Case Study. In: J. Bell, T. Busch, A. Fox, J. Goodey and S. Gouding, eds. *Conducting Small-Scale Investigations in Educational Management*. London: Harper and Row, pp. 79-92.
- Northouse, P.G., 2016. *Leadership: theory and practice*. 7th ed. Los Angeles, CA: SAGE.
- Novy, D.M. and Francis, D.J., 1992. Psychometric properties of the Washington University Sentence Completion Test. *Educational and Psychological Measurement*, 52(4), pp. 1029-1039.
- Novy, D.M., Frankiewicz, R.G., Francis, D.J., Liberman, D., Overall, J.E. and Vincent, K.R., 1994. An investigation of the structural validity of Loevinger's model and measure of ego development. *Journal of Personality*, 62(1), pp. 87-118.
- Ofsted, 2019. *Education Inspection Framework*. TSO: London.
- Oh, I.-S. and Berry, C.M., 2009. The Five-Factor Model of Personality and Managerial Performance: Validity Gains Through the Use of 360 Degree Performance Ratings. *Journal of Applied Psychology*, 94(6), pp. 1498-1513.
- Oplatka, I. 2017. Empathy Regulation among Israeli School Principals: Expression and Suppression of Major Emotions in Educational Leadership. *Journal of School Leadership*, 27(1), pp. 94-118.
- Osborn, R.N., Hunt, J.G. and Jauch, L.R., 2002. Toward a contextual theory of leadership. *The Leadership Quarterly*, 13(6), pp. 797-837.
- Pacanowsky, M., 1995. Team tools for wicked problems. *Organizational Dynamics*, 23(3), pp. 36-51.
- Palmberg, K., 2009. Complex adaptive systems as metaphors for organizational management. *The Learning Organization*, 16(6), pp. 483-498.

Paulhus, D.L. and Vazire, S., 2007. The Self-Report Method. In: R.W. Robins, R.C. Fraley and R.F. Krueger, eds. *Handbook of research methods in personality psychology*. New York, NY: Guilford Publications, pp. 224-239.

Peters, B.G., 2017. What is so wicked about wicked problems? A conceptual analysis and a research program. *Policy and Society*, 36(3), pp. 385-396.

Pfaffenberger, A.H., 2011. Assessing postconventional personality. In: A.H. Pfaffenberger, P.W. Marko and A. Combs, eds. *The Postconventional Personality*. New York, NY: SUNY Press, pp. 9-22.

Pfaffenberger, A.H. and Marko, P.W., 2011. *Exceptional Maturity of Personality*. New York, NY: SUNY Press.

Piaget, J., 1957. *Construction of Reality in the Child*. London: Routledge and Kegan Paul

Piaget, J., 1977. *Development of Thought: Equilibration of Cognitive Structures*. New York, NY: Viking Press.

Printy, S.M. and Marks, H.M., 2006. Shared leadership for teacher and student learning. *Theory into Practice*, 45(2), pp. 125-132.

Printy, S.M., Marks, H.M. and Bowers, A.J., 2009. Integrated leadership: How principals and teachers share transformational and instructional influence. *Journal of School Leadership*, 19(5), pp. 504-532.

Reams, J., 2017. An overview of adult cognitive development research and its application in the field of leadership studies. *Behavioral Development Bulletin*, 22(2), pp. 334-348.

Rind, D. 1999. Complexity and climate. *Science*, 284, pp.105–107.

Rittel, H. and Webber, M., 1973. Dilemmas in a general theory of planning. *Integrating Knowledge and Practice to Advance Human Dignity*, 4(2), pp. 155-169.

Robertson, J., 2008. *Coaching Educational Leadership: Building Leadership Capacity Through Partnership*. London: SAGE.

Robinson, O.C., 2014. Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, 11(1), pp. 25-41.

Robinson, V.M.J. and Timperley, H.S., 2007. The leadership of the improvement of teaching and learning: lessons from initiatives with positive outcomes for students. *Australian Journal of Education*, 51(3), pp. 247-262.

Robson, C., 2002. *Real World Research*. 2nd ed. Oxford: Blackwell.

Robson, C., 2011. *Real World Research*. 3rd ed. Chichester: John Wiley and Sons.

Rogers, C.R., Lyon, H.C. and Tausch, R., 2013. *On Becoming an Effective Teacher*. New York, NY: Routledge.

Rooke, D. and Torbert, W., 1998. Organizational transformation as a function of CEO's developmental stage. *Organization Development Journal*, 16(1), pp. 11-28.

Rooke, D. and Torbert, W., 2005. Seven transformations of leadership. *Harvard Business Review*, 83(4), pp. 66-76.

Rosete, D. and Ciarrochi, J., 2005. Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership and Organization Development Journal*, 26(5), pp. 388-399.

Rubin, M., Patrick, S.K. and Goldring, E.B., 2017. Dilemmas of prescriptive practices and perceived alignment in program implementation. *Peabody Journal of Education*, 92(5), pp. 609-626.

Saldana, J., 2012. *The Coding Manual for Qualitative Researchers*. 2nd ed. London: SAGE.

Sale, J. and Brazil, K., 2004. A strategy to identify critical appraisal criteria for primary mixed-method studies. *Quality and Quantity*, 38(4), pp. 351-365.

Salkind, N.J., 2010. *Encyclopaedia of Research Design*. Thousand Oaks, CA: SAGE.

Sampson, H. and Johannessen, I.A., 2020. Turning on the tap: the benefits of using 'real-life' vignettes in qualitative research interviews. *Qualitative Research*, 20(1), pp. 56-72.

Sayer, R.A., 2000. *Realism and Social Science*. London: SAGE.

Schneider, M. and Somers, M., 2006. Organizations as complex adaptive systems: Implications of Complexity Theory for leadership research. *The Leadership Quarterly*, 17(4), pp. 351-365.

- Schoenberg, N.E. and Ravdal, H., 2000. Using vignettes in awareness and attitudinal research. *International Journal of Social Research Methodology*, 3(1), pp. 63-74.
- Schön, D.A., 1983. *The Reflective Practitioner: How Professionals Think in Action*. New York, NY: Basic Books.
- Shapira-Lishchinsky, O., 2018. Critical incidents in ethical context: summary of updated studies. *International Aspects of Organizational Ethics in Educational Systems*. Bingley: Emerald Publishing, pp. 125-126.
- Singleton, R.A. and Straits, B.C., 2012. Survey Interviewing. In: J.F. Gubruim, J.A. Holstein, A.B. Marvasti and K.D. McKinney, eds. *The SAGE Handbook of Interview Research*. 2nd ed. Thousand Oaks, CA: SAGE, pp.77-98.
- Skaalvik, E.M. and Skaalvik, S., 2010. Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26(4), pp. 1059-1069.
- Skaalvik, E.M. and Skaalvik, S. 2011. Teachers' feeling of belonging, exhaustion, and job satisfaction: the role of school goal structure and value consonance. *Anxiety, Stress and Coping*, 24(4), pp. 369-386.
- Smith, A.F. and Fortunato, V.J., 2008. Factors influencing employee intentions to provide honest upward feedback ratings. *Journal of Business and Psychology*, 22(3), pp. 191-207.
- Snarey, J., 1998. Ego development and the ethical voices of justice and care: An Eriksonian interpretation. In: P.M. Westenberg, A. Blasi and L.D. Cohn, eds. *Personality Development: Theoretical, Empirical and Clinical Investigations of Loevinger's Conception of Ego Development*. London: Psychology Press, pp.163-181.
- Snarey, J., Kohlberg, L. and Noam, G., 1983. Ego development in perspective: Structural stage, functional phase, and cultural age-period models. *Developmental Review*, 3(3), pp. 303-338.
- Spalding, N.J. and Phillips, T., 2007. Exploring the use of vignettes: From validity to trustworthiness. *Qualitative Health Research*, 17(7), pp. 954-962.
- Spillane, J.P., 2006. *Distributed Leadership*. San Francisco, CA: Jossey-Bass.

Spring, J., 2015. *Economization of Education: Human Capital, Global Corporations, Skills-Based Schooling*. New York, NY: Routledge.

Srivastava, K., 2013. Emotional intelligence and organizational effectiveness. *Industrial Psychiatry Journal*, 22(2), pp. 97-99.

Stacey, R.D., 2000. *Strategic Management and Organisational Dynamics: The Challenge of Complexity*. 3rd ed. London: FT Prentice Hall

Stacey, R. D., Griffin, D., & Shaw, P. (2000). *Complexity and management: Fad or radical challenge to systems thinking?* London: Psychology Press.

Stader, D.L., 2006. Zero tolerance: Safe schools or zero sense? *Journal of Forensic Psychology Practice*, 6(2), pp. 65-75.

Stake, R.E., 2006. *Multiple case study analysis*. London: Guilford Publications.

Starbuck, W.H. and Milliken, F.J., 1988. Executives' perceptual filters: What they notice and how they make sense. In D. Hambrick, ed. *The executive effect: concepts and methods of studying top managers*. Greenwich, CT: JAI Press, pp.35-65.

Stewart, J., 2006. Transformational leadership: An evolving concept examined through the works of Burns, Bass, Avolio, and Leithwood. *Canadian Journal of Educational Administration and Policy*, (54), p. 1-29.

Stoll, L., McMahon, A. and Thomas, S., 2006. Identifying and leading effective professional learning communities. *Journal of School Leadership*, 16(5), pp. 611-623.

Stonewall. *Do Ask, Do Tell: Capturing data on sexual orientation and gender identity globally* [Online]. Available from: [https://www.stonewall.org.uk/sites/default/files/do\\_ask\\_do\\_tell\\_guide\\_2016.pdf](https://www.stonewall.org.uk/sites/default/files/do_ask_do_tell_guide_2016.pdf) [Accessed 01 April 2020].

Strang, S.E. and Kuhnert, K.W., 2009. Personality and Leadership Developmental Levels as predictors of leader performance. *The Leadership Quarterly*, 20(3), pp. 421-433.

- Sturm, R.E. and Antonakis, J., 2015. Interpersonal power: A review, critique, and research agenda. *Journal of Management*, 41(1), pp. 136-163.
- Sullivan, H., Perry, H.S., Gawel, M.L. and Cohen, M.B., 1968. *The interpersonal theory of psychiatry*. New York, NY: W Norton and Co.
- Sun, J. and Leithwood, K., 2012. Transformational school leadership effects on student achievement. *Leadership and Policy in Schools*, 11(4), pp. 418-451.
- Syed, M. and Seiffge-Krenke, I., 2015. Change in ego development, coping, and symptomatology from adolescence to emerging adulthood. *Journal of Applied Developmental Psychology*, 41, pp. 110-119.
- Taylor, B.J., 2006. Factorial surveys: using vignettes to study professional judgement. *The British Journal of Social Work*, 36(7), pp. 1187-1207.
- Teasley, M.L., 2014. Shifting from zero tolerance to restorative justice in schools. *Children and Schools*, 36(3), pp. 131-133.
- Timperley, H.S. and Robinson, V.M.J., 2001. Achieving school improvement through challenging and changing teachers' schema. *Journal of Educational Change*, 2(4), pp. 281-300.
- Torbet, W., 2017. *Brief comparison of five developmental measures: the GLP, the LDP, the MAP, the SOI, and the WUSCT* [Online]. Available from: <http://www.williamrtorbert.com/wp-content/uploads/2012/03/DevMeasuresCompared4714.pdf> [Accessed 10<sup>th</sup> March 2016].
- Tourangeau, R., Rips, L.J. and Rasinski, K. 2000. *The psychology of survey response*. Cambridge: Cambridge University Press.
- Trombly, C., 2014. Schools and complexity. *Complicity*, 11(1), pp. 40-58.
- Turner, J.R. and Baker, R., 2019. Complexity theory: An overview with potential applications for the social sciences. *Systems*, 7(1), pp. 1-23.
- Sutton Trust, 2020. *Covid-19 Impacts: School Shutdown*. [Online]. Available from: <https://www.suttontrust.com/wp-content/uploads/2020/04/COVID-19-Impact-Brief-School-Shutdown.pdf> [Accessed 15th July 2020].



- Tsang, E.W.K., 2014. Generalizing from research findings: The merits of case studies. *International Journal of Management Reviews*, 16(4), pp. 369-383.
- Vaillant, G.E. and McCullough, L., 1987. The Washington University Sentence Completion Test compared with other measures of adult ego development. *American Journal of Psychiatry*, 144, pp. 1189-1194.
- Van Velsor, E. and Drath, W.H., 2004. A lifelong developmental perspective on leader development. In C.D. McCauley and E. Van Velsor, eds. *The Center for Creative Leadership Handbook of Leadership Development*, pp. 383-414. San Francisco, CA. Jossey-Bass
- Vescio, V., Ross, D. and Adams, A., 2008. A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), pp. 80-91.
- Vessonen, E. 2019, Operationalism and realism in psychometrics. *Philosophy Compass*, 14(10), pp.1-13.
- Vincent, N., Ward, L. and Denson, L., 2013. Personality preferences and their relationship to ego development in Australian leadership program participants. *Journal of Adult Development*, 20(4), pp. 197-211.
- Vincent, N., Ward, L. and Denson, L., 2015. Promoting post-conventional consciousness in leaders: Australian community leadership programs. *The Leadership Quarterly*, 26(2), pp. 238-254.
- Waddock, S., Mesoely, G.M., Waddell, S. and Dentoni, D., 2015. The complexity of wicked problems in large scale change. *Journal of Organizational Change Management*, 28(6), pp. 993-1013.
- Warren, J., Bohanon-Edmonson, H., Turnbull, A., Sailor, W., Wickham, D., Griggs, P. and Beech, S., 2006. School-wide positive behaviour support: Addressing behavior problems that impede student learning. *Educational Psychology Review*, 18(2), pp. 187-198.
- Weick, K.E., 2001. *Making Sense of the Organization*. Oxford: Blackwell.
- Weick, K.E., Sutcliffe, K.M. and Obstfeld, D., 2005. Organizing and the process of sensemaking. *Organization Science*, 16(4), pp. 409-421.

- Wepner, S.B., Wilhite, S.C. and D'Onofrio, A., 2011. Using vignettes to search for education deans. *Perspectives: Policy and Practice in Higher Education*, 15(2), pp. 59-68.
- Wertz, F.J., 2014. Qualitative inquiry in the history of psychology. *Qualitative Psychology*, 1(1), pp. 4-16.
- West, A., 2007. Poverty and educational achievement: why do children from low-income families tend to do less well at school? *Benefits*, 15(3), pp. 283-297.
- Westenberg, P., Blasi, A. and Cohn, L., 1998. Introduction. In: P.M. Westenberg, A. Blasi and L.D. Cohn, eds. *Personality development: Theoretical, Empirical, and Clinical Investigations of Loevinger's Conception of Ego Development*. London: Psychology Press, pp.1-13
- Westenberg, P. M., Hauser, S. T., & Cohn, L. D., 2004. Sentence completion measurement of psychosocial maturity. In M. J. Hilsenroth & D. L. Segal (Eds.), *Comprehensive Handbook of Psychological Assessment*, Vol. 2. Personality assessment. New York, NY: John Wiley & Sons Inc.
- Wilber, K., 2000. *Integral Psychology: Consciousness, Spirit, Psychology, Therapy*. Boston, MA: Shambhala.
- Wiles, R., 2013. *What are Qualitative Research Ethics?* London: Bloomsbury.
- Wisby, E. and Whitty, G., 2016. Education in England – a testbed for network governance? *Oxford Review of Education*, 46, pp. 316-329.
- Witziers, B., Bosker, R.J. and Krüger, M.L., 2003. Educational leadership and student achievement: The elusive search for an association. *Educational Administration Quarterly*, 39(3), pp. 398-425.
- Wolgemuth, J.R., Erdil-Moody, Z., Opsal, T., Cross, J.E., Kaanta, T., Dickmann, E.M. and Colomer, S., 2015. Participants' experiences of the qualitative interview: Considering the importance of research paradigms. *Qualitative Research*, 15(3), pp. 351-372.
- Wong, C.S. and Law, K.S., 2002. The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly*, 13(3), pp. 243-274.
- Woods, P.A. and Roberts, A. 2018. *Collaborative School Leadership: A Critical Guide*. London: SAGE.

Woodside, A.G., 2010. *Case Study Research: Theory, Methods, Practice*. Bingley: Emerald Group.

Woolsey, L.K., 1986. The critical incident technique: An innovative qualitative method of research. *Canadian Journal of Counseling*, 20(3), pp. 242-242.

Wright, N., 2011. Between 'Bastard' and 'Wicked' leadership? School leadership and the emerging policies of the UK Coalition Government. *Journal of Educational Administration and History*, 43(4), pp. 345-362.

Yin, R.K., 2003. *Applications of Case Study Research*. 2nd ed. London: SAGE.

York, K.L. and John, O.P., 1992. The four faces of Eve: A typological analysis of women's personality at midlife. *Journal of Personality and Social Psychology*, 63(3), pp. 494-508.

Yukl, G.A. 2002. *Leadership in Organisation*, 5th ed. Upper Saddle River, NJ: Prentice-Hall.

Zorn, D. and Boler, M., 2007. Rethinking emotions and educational leadership. *International Journal of Leadership in Education*, 10(2), pp.137-151.

## Chapter 8 Appendices

Appendix 1: Blank example of the WUSCT assessment.

Appendix 2: Example of scoring WUSCT result.

Appendix 3: Semi-structured interview protocol.

Appendix 4: Preparation document for interview.

Appendix 5: Vignettes

Appendix 6: Example of Feedback to HT/Ps

Appendix 7: Coding Tree from First Cycle Coding

*Appendix 1: Blank Example of the WUSCT Assessment.*

## **INSTRUCTIONS – PLEASE READ THESE FIRST.**

The questionnaire is made up of 36 incomplete sentences.

What you need to do is fill in the sentences.

### Instructions

1. Your answer can be as short or as long as you feel necessary. You don't have to give your first immediate response, but you can if you want to.
2. Some of the stems might be a surprise to you. If you don't want to answer one of the questionnaire stems, that is absolutely fine. What we do ask is, if you do not wish to respond to the stem, **please make sure you say why**. Your reason for rejection is as much interest to us and can be scored.
3. Most people spend between 15 -45 minutes completing the questionnaire, but this is personal preference. You can take as a little or as long as you like.
4. You can handwrite or type the answers

WUSCT (M)Name; \_\_\_\_\_ Age; \_\_\_ Gender; \_\_\_ Education; \_\_\_\_\_

Instructions: Complete the following sentences.

1. When a child will not join in group activities
2. Raising a family
3. When I am criticised
4. A man's job
5. Being with other people
6. The thing I like about myself is
7. My mother and I
8. What gets me into trouble is
9. Education
10. When people are helpless
11. Women are lucky because
12. A good father
13. A girl has a right to
14. When they talk about sex, I
15. A wife should
16. I feel sorry
17. A man feels good when
18. Rules are

19. Crime and delinquency could be halted if
20. Men are lucky because
21. I just can't stand people who
22. At times he worried about
23. I am
24. A woman feels good when
25. My main problem is
26. A husband has a right to
27. The worst thing about being a man
28. A good mother
29. When I am with a woman
30. Sometimes he wished that
31. My father
32. If I can't get what I want
33. Usually he felt that sex
34. For a woman a career is
35. My conscience bothers me if
36. A man should always



*Appendix 2: Example of Scoring WUSCT Result*

Individual Level	RATER 1	RATER 2	Comprise	Notes
1	6b	6b		
2	4b	4b		
3	4g	4g		
4	4b	4b		
5	4d	4d		
6	7a	5a	6a	Decided interpersonal ability not distinct enough, but was more than simple "caring" statement in 5a
7	5b	5b		
8	4f	4f		
9	4d	4d		
10	4b/e	4b/e		
11	3e	3e		
12	5n	5n		
13	5b	5b		
14	5a	5a		
15	5w	5w		
16	5d	5d		
17	6c	5c	6c	Implied reference to security "knows what theyre doing and enjoys...." knowing = secure, came first, pushes to 6.
18	4f	4f		
19	4c	5c	5c	perfectionism- we strive to be at our best....strive,
20	5o	5o		
21	6a	6a		
22	4f	4f		
23	5d	5d		
24	3a	3a		
25	5w	5w		
26	5h	5h		
27	5g	5g		
28	5d	5d		
29	3f	3f		
30	4q	4q		
31	6a	6a		
32	5n	5n		
33	4i	4i		
34	3f	3f		
35	5r	5r		
36	5e	5e		

Scoring Mechansim				
AED Level	AED Level (number)	Frequency	Score (E x Freq)	Cum Freq
Impulsive		2		0
Self Protective		3	4	12
Conformist		4	11	44
Self-Aware		5	17	85
Consci		6	4	24
Individualist		7		0
Autonomous		8		0
		Item Sum Score	165	
		STAGE Score	Self Aware	
		Rationale	Item sum score within range. All Ogive rules met (no more than 20 ratings at E4; 16+ at Self Aware and above. Matches the two raters general assumptions.	

Scoring Rules (Hy and Loevinger 1998)				
Stage	Stage (Number)	Item Sum Score	Ogive rules	
Conformist	4	146-162		
Self-Aware	5	163-180	No more than 20 ratings at E4	16ratings+ at AED 5
Consci	6	181-200	No more then 24 ratings at E5	12ratings+ at AED 6
Individualist	7	201-216	No more than 30 ratings at E6	6 ratings+at AED 7
Autonomous	8	217-234	No more than 31 ratings at E7	5 ratings at AED 8

*Appendix 3: Semi-Structured Interview Protocol.*

## Methodology Brief

### Measuring Ego Development - Collecting Experience of Head teacher and Colleagues

#### *Objectives*

- To record the head teachers' actions from a critical incident within the past 3 months.
- To record the rationales for behind the head teachers' actions
- To collect data on how the head teacher believed they interacted with other people
- To corroborate the head teacher's account of their actions with that of other people
- To record the concrete behaviours which other individuals directly observed
- To record how others experience the head teacher during a critical incident
- To record colleagues' perspectives on what they perceived to be the thoughts and feelings behind the head teachers actions and style of interaction.

#### *Methods Applied*

The main method will be critical incident technique, underpinned with phenomenological interview technique

#### *Interview Protocol*

#### Questioning Guidance for Unscripted Questions

The interviewer will be encouraged to adhere to the following guidance.

- 1) The interviewer should push for greater definition and clarity.
  - a. Citing further evidence; You said that you felt person felt like x. What was it that made you collect that opinion?
  - b. Further explanation: Could you explain this further?
  - c. Context; Do you think that there was anything within the time scale/environment that could have influenced this decision?
- 2) The interviewer should be willing to challenge.
  - a. Inconsistency: "Earlier you said X. Now you are not too sure. Has the conversation made you change your mind?"; "You said you felt X but you acted and supported the head anyway. How come?"
  - b. doubt/dissonance; "You seem a little unsure about that answer?"; "Was there anything else that was running through your head at the time?"
  - c. Lack of clarity; "I wasn't quite sure what you meant there, could you explain this a little more for me?"
- 3) The interviewer should use multiple techniques to ensure that they have correctly understood the interviewee.
  - a. Carbon Copying – "P: So, I Think that he was important", I: So you thought X was important?"
  - b. Summarising – Summarising a long piece of text and seek confirmation that you have interpreted this correctly.

However, for the interviewee to be willing to engage in such challenge, the space and environment should be relaxed and comfortable. This includes.

- Reassuring the confidential nature of the interview

- Explaining to the participant that the interview itself is not an evaluation – just exploring an honest description.
- Prior to interview, the approach of the interview will be explained to the participant – that the purpose of the interview will be to promote reflection and further thought on these incidents and to work together. It will be explained that one of these techniques will be the use of challenging questions, with the examples stated above shown to the participant. The participant will be reassured that this is not to question the validity of their account, but simply to promote their further reflection and for my understanding.
- The participant will be encouraged to own the physical space – selection of room, sitting where they feel most comfortable.

### Description Vs Explanation

The goals of the interview are extract rich description of the behaviour, thoughts and feelings that occurred within the critical incident, along with the context of the incident itself. In addition, we want to attain the essential element of the event which guided the head-teacher.

The goal of analysis is to interpret the description and relate this to ego development theory. Thus, the interview should avoid asking the individual to explain why they behaved the way they did – until the very end of the interview. This is to prevent “over-reflection” (Brinkmann and Kvale 2014) which could affect the recall of the critical incident. Furthermore, as ego operates at the unconscious level, such explanation might be unavailable to the participant and thus might be unreliable. (Loevinger 1974).

### Restrictions on Events

Edvarrson et al (2000) discussed the role of memory and the affect this can have on critical incidents. There is a balance to be struck between allowing sufficient time between now and the incident for the individual to have reflected on the incident and become emotionally detached; however, too much time between the current moment and the incident could

- Promote over reflection
- Experiences since that event might “cloud” or influence the recall and interpretation of the event by the individual
- Nuanced elements of the incident might have been lost over time.

There is no recommended time limit in the literature. Therefore, I will be requesting that the incidents reflected upon are limited **to within this academic year. The reason behind this is as follows.**

- There will have been sufficient time away from work which the individuals could detach from the incident – this includes achieving closure on any emotionally or practically pertinent moments within the incident that might affect how they recall the incident.
- Having only been three months into the academic year, the events should still be relatively fresh with the individual’s mind. This will allow them to recall specific, nuanced details about the incident and their thinking.

## Interview Structure for Head-teacher – Recalled Incident

- The structure revolves around five themes.
  - 1) Outlining the critical incident
  - 2) Focusing on behaviour
  - 3) Focusing on feeling
  - 4) Focusing on thoughts
  - 5) Reflection of perception by others/themselves

For themes 2-4, we are interested in their feelings/thoughts/behaviour upon becoming aware of the situation, during the incident and their reflections immediately after the incident had taken place.

### *Theme 1*

*NB Prior to the interview, the participant will be contacted with a brief summary of what to expect during the interview. Question 1 will be provided in advance so that the participant can reflect prior to the interview. This will aid recall but also ensure that the individual has selected an event they feel comfortable with and feels represents the truest version of themselves.*

- 1) I would like you to describe one incident that has occurred since X. This incident should be a typical, day-to-day incident that reflects how you think, feel and behave on a regular basis. Please describe as much about the incident, including any context.
- 2) In what ways is this a typical, day to day incident for you?

### *Theme 2-4*

Let's now dissect each incident for your behaviour, your thoughts and your feelings. We will explore each theme discretely, starting with your behaviour first. If this is ok with you, we will go through the incident for your behaviour chronologically - when you found out about the incident, during the incident and then on reflection of the incident.

We will then follow this pattern for your feelings and thoughts.

	Theme 2 Behaviour	Theme 3 Feeling	Theme 4 Thoughts
Before/On Presentation of Incident	1) What acts did you take to understand the situation?  2) What was your initial plan of action?  3) Was any other people involved within the design or implementation of this action plan?  3a) If YES – discuss further in detail	9) How did you feel when the situation presented itself?  10) How do you think those around you felt?	16) What were your initial thoughts on the situation?  17) What do you think was running through the heads of those around you?

	3b)IF no – what made the h/t develop the plan alone?		
During the Incident	<p>4)What actions did you end up taking?</p> <p>6)How did your initial plan of action change over time?</p> <p>6a)If YES – what influenced the change?</p> <p>6b) IF no – what made the h/t stick?</p>	<p>11)What was the journey of your feelings throughout the incident?</p> <p>12)How do you think those around you felt during this time?</p> <p>13)Did any of these feelings influence your approach?</p> <p>13a)If YES – what influenced the change?</p> <p>13b) IF no – what made the h/t stick?</p>	<p>18)What was your thought process going through the incident?</p> <p>19)What information as particularly important to you in guiding your decision?</p> <p>20) Did your priorities change?</p> <p>21) Were there any other peoples’ thoughts and challenges which particularly influenced you?</p> <p>21a)If YES – what influenced the change?</p> <p>21b) IF no – what made the h/t stick?</p>
On reflection:	<p>7) If you could do this again, how would you act?</p> <p>8)Have there been any repercussions on you or others of your actions since?</p>	<p>14) On reflection, how do you feel about the process by which you took action throughout the incident?</p>	<p>22) On reflection, would you have changed the process by which you came to action?</p> <p>22a)If YES – what influenced the change?</p> <p>22b) IF no – what made the h/t stick?</p>

#### Interview Structure for Head-teacher – Hypothetical Critical Incident

- Continue to follow the rules outlined above RE Questioning Guidance and Description Vs Explanation
- The headteacher is to be given the vignette to read and consider.
- The questions should follow a similar structure to before.

	Theme 2 Behaviour	Theme 3 Feeling	Theme 4 Thoughts
Presentation of Incident	<p>1) What acts would you take to understand the situation?</p> <p>2) What would be your initial plan of action?</p> <p>3) Would you consider the involvement of anyone else within the design or implementation of this action plan?</p> <p>3a) If YES – discuss further in detail</p> <p>3b) If no – what made the h/t develop the plan alone?</p>	<p>9) How did you feel when the situation was presented?</p> <p>10) How would you think those around you would feel?</p>	<p>16) What were your initial thoughts on the situation?</p> <p>17) What would you anticipate those around you thinking?</p>
Responding to the Incident	<p>4) What actions do you think you might end up taking?</p> <p>6) Would there need to be a plan for change?</p> <p>6a) If YES – what influenced the change?</p> <p>6b) If no – what made the h/t stick?</p>	<p>11) As you were reading this, what was the journey of your feeling?</p> <p>12) How could you envisage those around you feelings?</p> <p>13) On reflection, did these feelings influence your approach?</p> <p>13a) If YES – what influenced the change?</p> <p>13b) If no – what made the h/t stick?</p>	<p>18) What was your thought process going through the incident?</p> <p>19) What information was particularly important to you in guiding your decision?</p> <p>20) Did your priorities change as you read the text?</p> <p>21) Were there any other peoples' thoughts and challenges which particularly influenced you?</p> <p>21a) If YES – what influenced the change?</p> <p>21b) If no – what made the h/t stick?</p>



On reflection:	7) Following our discussion, if you could do this again, how would you act?  8) What could you envisage as the repercussions of the incident?	14) On reflection, how do you feel about the process by which you would anticipate taking action?	22) On reflection, would you have changed the process by which you came to your intended action? 22a) If YES – what influenced the change? 22b) If no – what made the h/t stick?
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### Interview Structure for Colleagues

The structure revolves around five themes.

- 6) Outlining the critical incident
- 7) Focusing on behaviour
- 8) Focusing on Feeling
- 9) Focusing on Thoughts
- 10) Reflection of perception by others/themselves

For themes 2-4, we are interested in their feelings/thoughts/behaviour upon becoming aware of the situation, during the incident and their reflections immediately after the incident had taken place.

#### *Theme 1*

- 3) I would like you to describe one incident directly involving the head teacher that has occurred since September. This incident should be a typical, day-to-day incident that reflects how the head teacher thinks, feels and behaves on a regular basis. Please describe as much about the incident, including any context.
- 4) In what ways is this a typical, day to day incident for them?

#### *Theme 2-4*

Let's now dissect each incident for their behaviour, thoughts and feelings. We will explore each theme discretely, starting with their behaviour first. If this is ok with you, we will go through the incident for their behaviour chronologically - when they found out about the incident, during the incident and then on reflection of the incident.

We will then follow this pattern for their feelings and thoughts.

	Theme 2 Behaviour	Theme 3 Feeling	Theme 4 Thoughts
Before/On Presentation of Incident	1) What acts did the h/t take to understand the situation?  2) What was their initial plan of action?  3) Was any other people involved within the design or	9) What emotions did the head teacher demonstrate when the situation presented itself?  10) Was the head teacher aware of how others were feeling??	16) In what ways, if at all, did the h/t communicate his thoughts on the incident to you?  17) Was the head teacher aware of how others were thinking??

	<p>implementation of this action plan?</p> <p>3a)If YES – discuss further in detail</p> <p>3b)IF no – what made the h/t develop the plan alone?</p>		
During the Incident	<p>4)What actions did they end up taking?</p> <p>6)How did their initial plan of action change over time?</p> <p>6a)If YES – what influenced the change?</p> <p>6b) IF no – what made the h/t stick?</p>	<p>11)How did you perceive the heads emotions throughout the incident?</p> <p>12) Was the head teacher aware of how others were feeling??</p> <p>13)Did any of these feelings influence his approach?</p> <p>13a)If YES – what influenced the change?</p> <p>13b) IF no – what made the h/t stick?</p>	<p>18)What was their thought process going through the incident?</p> <p>19)What information appeared to be most influential on the head teacher?</p> <p>20) Did their priorities change?</p> <p>21) Were there any other peoples' thoughts and challenges which particularly influenced the headteacher?</p> <p>21a)If YES – what influenced the change?</p> <p>21b) IF no – what made the h/t stick?</p>
On reflection:	<p>7) If you could do this again, how do you wish the head teacher acted?</p> <p>8)Has there been any repercussions on you or others of their actions since?</p>	<p>14) On reflection, how do you feel about the process by which the head teacher took action throughout the incident?</p>	<p>22) On reflection, how would you evaluate how the headteacher went about the process of addressing the incident</p>

Theme 5: Reflection of perception by others/themselves

- 3) How do you feel the critical incident was perceived by the head teacher?
- 4) Was the head teacher responsive to how the team was perceiving the head teachers' actions?

Interview Structure for Head-teacher – Hypothetical Critical Incident

- Continue to follow the rules outlined above RE Questioning Guidance and Description Vs Explanation
- The person is to be given the vignette to read and consider.
- The questions should follow a similar structure to before.

	Theme 2 Behaviour	Theme 3 Feeling	Theme 4 Thoughts
Presentation of Incident	<p>1) What acts would you anticipate the headteacher would take to understand the situation?</p> <p>2) What would be anticipated to be their initial plan of action?</p> <p>3) Would they consider the involvement of anyone else within the design or implementation of this action plan?</p> <p>3a) If YES – discuss further in detail</p> <p>3b) If no – what made the h/t develop the plan alone?</p>	<p>9) What emotions would you anticipate the head teacher demonstrating in this situation?</p> <p>10) Would you anticipate the head teacher being aware of how others could be feeling?</p>	<p>16) In what ways, if at all, would the h/t communicate their thoughts on the incident to you?</p> <p>17) Do you think the head teacher would be aware of how others were thinking??</p>
Responding to the Incident	<p>4) What actions do you think you might end up taking?</p> <p>6) Would there need to be a plan for change?</p> <p>6a) If YES – what influenced the change?</p> <p>6b) If no – what made the h/t stick?</p>	<p>11) How did you perceive the headteachers emotions throughout the incident?</p> <p>12) Would the head teacher be aware of how others were feeling?</p> <p>13) Would any of these feelings influence his approach?</p> <p>13a) If YES – what influenced the change?</p> <p>13b) If no – what made the h/t stick?</p>	<p>18) What would you think their thought process would be going through the incident?</p> <p>19) What information would you think would be most influential on the head teacher?</p> <p>20) Would their priorities change?</p> <p>21) Could you envisage any other peoples' thoughts and challenges which could be particularly</p>

			<p>influenced the headteacher?</p> <p>21a) If YES – what would influence the change?</p> <p>21b) IF no – what would make the h/t stick?</p>
On reflection:	8) Could the headteacher envisage any repercussions of the incident?	14) If this was a real incident, how do you feel about the process by which the head teacher took action throughout the incident?	22) On reflection, how would you evaluate the headteacher and how they went about the process of addressing the incident?

## *Appendix 4: Preparation Document for Interview*

Dear X

Thank you for volunteering to be involved in my research project. This pack consists of three sections will summarise the research project, what your involvement will entail and an ethical agreement

### **What is the Research?**

In this research, I am exploring the role of adult ego development in school headship.

I have written a few words about the research here. However, you could also watch my 1 minute video explaining what my work is all about <https://spark.adobe.com/video/JpGxlwdqiqpXY>

The core idea behind my work is that we are always making sense of the world around us. In the 1970's, Jane Loevinger found there were 8 stages for how people go about making sense of the world, which she called "Ego Development Stages". If you go to [www.egodevelopment.co.uk](http://www.egodevelopment.co.uk), you can see what these stages are.

What's important about these stages is

They effect how a wide range of factors, from how complex we view the world to how we deal with people

People can move through these stages throughout their lives.

My study is trying to see if head teachers in different stages have different ways of leading their schools.

### **What Would This Study Involve?**

A 36-item questionnaire called the WUSCT (Washington University Sentence Completion Test). This will tell each head teacher their Adult Ego Development Stage.

In addition, should you be selected as a case study, I would need to conduct the following:

- Preparation Exercise (See Sheet 3)
- A 30 minute interview where I'd ask you about you handled an incident in your school
- A separate interview in relation to how you would anticipate responding to a hypothetical school-related incident.

I will also need to conduct a separate interview with:

- Your Deputy/Assistant Headteacher.
- Your Chair of Governors, or someone whom line manages you.

This interview will be about an incident they observed yourself in and how they would expect you to respond to the same hypothetical critical incident.

- All the data would be confidential and wouldn't be shared to anyone.
- All information they provide would be confidential, and ethical approval has been provided by the University of Bath.

**What's Would Participants Get?**

At the end of the study, they would receive a report entailing what their score was and the themes from across their developmental stage

If you are selected as a case study, you would also receive 3 coaching sessions. I am an experienced coach, and I currently support coaching and mentoring across the public and private sector on behalf of the University of Gloucestershire through our MA course. The coaching would be focused on what this result mean for you, exploring your context a bit more and thinking about your own next steps in realising the full potential of the information that the developmental stage gives you.

## **Ethics Agreement**

The purpose of this document is to provide a clear understanding of how we will treat any data you provide for research purposes.

Your confidence in the protection of what you want to say is crucial to our research – it is this confidence that will allow you to feel open about your experiences. As a result, we can provide a true picture of if (and how) our work is generating impact.

Therefore, we are keen to provide the reassurance that you and your data will remain confidential. You are protected through multiple routes within each stage of the research.

### ***How will my data be managed?***

The following data protection processes are in place:

- This research follows guidelines set out by the British Education Research Association. As a result, we are duty bound to follow their ethical procedures.
- Raw data shall always remain confidential and will only be stored as long as necessary.
- During the project, completed assessments, transcriptions, audio files and notes will remain on University of Bath secure servers. These will not be shared beyond myself and those associated with the research project. At the end of the project, they will be removed.
- You will have the right to always withdraw, refuse to answer questions and to access the draft copy of their transcript.
- Following the interview, you can choose to receive a draft copy of your transcript. If you choose this, you can edit, add, or delete anything from the transcript.
- Furthermore, you can demand that we destroy your interview or assessment data at anytime.
- Names of participants, other members of staff/students will be removed at the point of transcription/assessment and replaced with a randomly assigned number or letter. Any other factors (personal circumstances, school name, name of other individuals involved etc.) which could potentially identify both the participant or anyone else, will also be removed at the point of transcription/assessment.
- We will keep generic demographic details of the headteacher. These including age; gender; and type of school (primary or secondary). This will be for the purpose of describing the generic features of each AED stage group and to ensure a fair and balanced sample. .

### ***Where will my data be stored?***

As this research is part of the University of Bath, we adhere to the procedures and policies outlined in the Data Protection Act and GDPR.

- We do not save raw interview data (audio files, transcribed interviews or notes) on personal systems.
- All data will be immediately uploaded to the University of Bath secure server and will only be accessed through this server.
- The data will be removed and destroyed according to the policy below.

### ***What will happen to my data once it has been transcribed/analysed?***

Once we have coded/analysed interview data, we will delete all transcripts and notes. This includes

- The removal and subsequent deletion of primary data, including assessments and audio files.
- The secure destruction of any handwritten notes
- The removal and subsequent deletion of any transcribed interview data.

- Once your WUSCT assessment has been scored, the raw data and subsequent notes will be securely destroyed.

### ***How will my data be shared?***

In any subsequent publication of the research, we will be sharing the number of people who scored at each stage and treating this as a case study. We will share the basic demographic information of each stage group. Specifically:

- the number of male and females.
- the number in primary and secondary schools.
- the general age of individuals found at each stage.

In any subsequent publication of the research, we would then treat each developmental stage as a combined case study. In this combined case study, we are highlighting the common themes that occurred **across the individuals within group. We will not be discussing specific individual cases.** Occasional quotations might be used to bring attention to any salient points. No quotes or references will be selected that could make the interviewee identifiable to a third party and all identifying marks will be removed. A generic description of the incident might be provided, such as “In an incident surrounding teacher pay...” or “During a meeting with the School Governors, “.

Part of the assessment within the WUSCT will involve a second scorer. The second scorer assigned to this project is a member of the British Psychological Society and thus bound by their ethical code. In addition, the assessment presented to the second scorer will be anonymised and demographic details removed.

As this research is part of a PhD study, processed data and subsequent findings will be shared with the two project supervisors, Professor Chris James and Dr. Sam Carr. Both individuals will also be held to the same ethical agreement.

As part of the research, we are offering all headteachers a series of feedback session. You might be concerned that, due to the nature of the research, there is the risk that the head teacher might be able to identify anecdotes about them from a given source. This carries risk for both the head teacher and their colleagues.

Therefore, reporting of these incidents will be done with sensitivity;

- The head teacher will receive their ego development score along with a report detailing the themes generated across the **whole cohort of individuals within that given ego stage**. This will read along the lines of “individuals with stage x typically navigated school situations in Y way”.
- In this way, head teachers will not be able to access the specifics detail which you provide on their practice.
- The best attempt will be made to remove data which could identify the interviewee at point of transcription.
- You can choose to access a draft transcription, to which you can remove data or edit the transcript prior to data analysis.
- I will not discuss any specific insights from the interviews given and focus on giving feedback from the general findings of their AED group.



We hope this provides the necessary reassurance that would make you feel comfortable enough to take part in these interviews. Should you have any further questions or concerns, please email at [n.gilbride@bath.ac.uk](mailto:n.gilbride@bath.ac.uk).

Sign:

Date:

## Participant Instructions.

Dear X

Thank you for agreeing to participate in the study and for returning the signed ethical and confidentiality agreement.

In advance of our meeting on X, please ensure that the following is complete

- 1) If you are a headteacher, you would have received a WUSCT test to complete. Please ensure that the WUSCT assessment is complete. Please ensure that you return this to me via a private email account (We are aware that headteachers often have personal assistants that can access emails on your behalf. Subsequently, I always advise that you send your WUSCT response from a personal, private or secure account).
- 2) I would like you to identify a critical incident that has occurred in the last 3 months. Please follow the specific instructions as related to your role:
  - a. *If you are a Headteacher:* I would like you to describe one incident that has occurred in the last 3 months. This incident needs to meet the following criteria:
    - i. I am interested in when you face a specific type of problem. These are often referred to as wicked problems. These wicked problems have the following features:
      1. They have particularly unique elements and can be challenging to define.
      2. They often carry on for some while after the incident.
      3. It is hard to find a right answer and a clear solution to the problem
      4. They can have a last effect on the organization – it doesn't have to be large, but it will affect how the team or organization works or conducts their business.
    - ii. This incident should be a typical, day-to-day incident that reflects how you think, feel and behave on a regular basis.
    - iii. Please describe as much about the incident, including any context.
  - b. *If you are the Headteachers line manager/Deputy Headteacher:* I would like you to describe one incident directly involving the head teacher that has occurred in the last 3 months. This incident needs to meet the following criteria
    - i. You must have directly observed the headteachers involvement.
    - ii. I am interest in when they face a specific type of problem. These are often referred to as wicked problems. These wicked problems have the following features:
      1. They have particularly unique elements and can be challenging to define.
      2. They often carry on for some while after the incident.
      3. It is hard to find a right answer and a clear solution to the problem
      4. They can have a last effect on the organization – it doesn't have to be large, but it will affect how the team or organization works or conducts their business.
    - iii. This incident should be a typical, day-to-day incident that reflects how the headteacher think, feel and behave on a regular basis.
    - iv. Please describe as much about the incident, including any context.

Prior to the interview, I would like to arrange a brief 5-10 conversation so that we can discuss the incident you have in mind.

*Appendix 5: Vignettes*

## Draft Vignette for Primary HT/Ps

You are the headteacher of a suburban primary school. You have been in post for 4 years. The school has a mixed intake of relatively affluent and disadvantaged students; however, the area is calm and friendly. The school has had a good Ofsted grade for over 15 years. The pupil roll is good and there is low staff turnover.

Your school administrator has just finished compiling the daily attendance records. In the report, you notice that two brothers, X and Y, have not come into school. This is the third consecutive Monday in which both brothers have not attended. As with the previous incidents, no prior warning had been sent to the school.

The last name is familiar to you. You realise that these are the children of a parent governor. You know her reasonably well – she has served a parent governor throughout your headship.

You leave your office to find the deputy head teacher as they hold the responsibility for pupil welfare. When you inform him of X and Y absence, he reports that he noticed at the last governors meeting, the parent was “carrying the weight of the world”.

You go to speak to the classroom teacher. She is unaware of any possible reason for this absence pattern and the children seemed fine to her.

When you come back to your office, the school office wants to know how you would like to proceed. She reminds you that that local authority policy on attendance is that you would be expected to take further action, up to and including a fine.

## Draft Vignette for Secondary HT/Ps

**You were appointed as headteacher to a suburban secondary school 6 months ago. Pupil roll is strong and staff turnover is low. The school has been consistently good for the past 8 years.**

At 4pm, you receive a phone call from a parent complaining about a teacher who has “shouted at a child in class”. On the phone, the parent started to cry and was upset by the incident.

The child and parent are both known to you. In the past 3 months, after facing significant difficulties at school and home, the child received a diagnosis of ADHD from the local Child and Adolescent Mental Health Service.

You call in your deputy headteacher. The deputy headteacher, like most of the senior leadership team, have served at the school for the past 3 years. They recalled a complaint from 2 years ago that was raised against the same teacher, 2 years ago. However, in investigating that incident, due process was not adhered to. As a result, the complaint was dropped, and no further action was taken.

The school has a 48-hour policy. In this policy,

- You have 48 hours to investigate and subsequently write to the parent, informing them that you have conducted an investigation and that you have decided the next steps.
- The policy recommends that you delegate the responsibility for the investigation to another member of the senior leadership team.

*Appendix 6: Example of Feedback to Headteacher/Principals*

## Introduction

Thank you for taking the time to complete the research project. I hope these results and the resulting conversations prove of value to you.

Before you go to the next page, it is important that you read the following information.

### What we did with your data

Last year, you and your colleagues told us how you typically respond to the complex, wicked problems in your organisation. We also asked 19 other headteachers to do the same.

- We analysed the interview task and vignette responses. In this analysis, I looked for the common themes from across all three participants.
- After this data was analysed, your ego development test response was scored. Another trained assessor and I scored the assessment. The result of this test determined your ego development group.
- We then compared the themes from all the individuals in the same group, looking for the themes that commonly occurred across all the individuals within that group.

Throughout the process, your name and school were anonymised. Key quotes, void of any identifying details, are used to capture the essence of each theme.

### What is in this document,

This document is composed of two different pieces of data.

- 1) The result from the ego development test (The WUSCT).
- 2) The common themes that emerged from across the participants who scored in the same group as you.

The result is a general snapshot of how you typically handle complex tasks within your organisation. These are not steadfast rules of how you apply yourself in every situation: there will always be times where how you would typically respond is compromised by other factors. Therefore, this result and description is not a definitive account, but merely a guiding frame for reflection.

### What you will not find in this document.



**The findings are not a diagnosis** – Ego development is all about development. Hopefully, you can find this information informative and useful to continue your journey. Unlike other personality constructs, ego is not static and can move through the lifespan.

**The findings are not a personal review of how you handle the situation** – The analysis focused on the common themes between headteachers who scored within the same ego development group (as determined by the WUSCT). Consequently, some of your nuances will likely be missing. However, what you will receive is a set of common themes that should give you a good general account of how you respond to these situations. These themes have had to emerge from 64 separate data points involving not just headteachers, but also those around them.

**The findings are not a judgement** – Complex tasks, by the very name, are complex. The complexity of these tasks can make it difficult to decide the right course of action. What I hope to provide is not a rank or judgement, but some ideas for reflection based on a robust, psychological profile.

#### Working Together.

Over the next few weeks/months, we will work together on what these findings mean for you. As a thank you for your participation, I am offering three coaching sessions over the phone or skype.

Session 1 will talk you through this report. We will look to see what you can identify in your practice and areas that you perhaps need to reflect on further. We could discuss what the stage above looks like or we can look at maximising the strengths. We will look to do a self-observation exercise and reflection which you will complete before session 2.

Session 2 and Session 3 will explore your self-observation and reflection exercises. We will look at specific events that had occurred in the time between sessions, how you can see your sense-making reflected in these decisions and how you feel about them

## Part 1: Ego Development Stage

### A Reminder on the Ego Development Construct.

Ego development was developed in the 1960's by Jane Loevinger and revised in 1998. The core idea behind her theory is that we are constantly making sense of the world and how we make sense of the world changes as we move through our lives. Her theory, "ego development", attempted to capture the shifts in an individual sense-making through 8 life stages.

Of these 8 groups, we found individuals in the 3 most common adult groups.

- Self-Aware
- Conscientious
- Individualist.

### How the Score was Reached.

After you had completed the WUSCT, the result was sealed until the data analysis on the interviews and questionnaire was completed. The test was scored independently by two psychologists using the WUSCT manual. These were then cross-referenced to ensure for accuracy.

### Score.

Based on the responses to the WUSCT questionnaire, you scored at the **Individualist** ego development stage.

## How Headteachers in the Individualist Group Handle Complex Tasks.

Headteachers across the Individualist stage place great importance on the role of others in responding to incidents; headteachers worked closely with those around them, seeking out their perspectives, the reasons behind the incidents and their assistance in building a combined understanding of the incident. Also, the headteacher recognised the complexity of the incident; that incident is impacted, and impact upon, a range of internal and external factors.

### Responding to tasks

- Headteachers would seek information beyond the reasons of others, and hard data was of interest. In addition to this data, headteachers within the Individualist stage also sought out information that was not quantifiable but offered other insights into the situation. This information was broad – ranging from body language to informal insights. These headteachers were happy to work with this less tangible information to achieve an understanding that goes beyond what was observed by those around them.
- Headteachers in the Individualist stage were comfortable for their understanding of the situation to gradually emerge as new information came to light. They seek to understand the situation in an open-ended way: as new information comes to light; their understanding shifts accordingly. In addition, Individualists will usually continue to interact with their environment until they are satisfied – they use each re-immersion to achieve a deeper understanding or to try to understand the situation in a different light
- Headteachers within the Individualist stage involved those around them in making sense of the situation. Through discussions with others, the headteacher would slowly build a picture through questioning and discussion. In addition to the themes already discussed, the headteacher would use these opportunities to critically explore where their understanding of the situation has arisen from, with the purpose of empathising with the position of others.
- Headteachers would discuss the need for time to think and reflect while they are making their decision or thinking about what they need to do next. Headteachers would seek out moment to talk through the image that had developed so far and the next steps they would take.
- For headteachers in the individualist stage, each incident exists as part of a network of other individuals and events. Headteachers were aware that; there was often a history to each event; that the event itself and the subsequent response would have consequences (or 'ripples') beyond the immediate time-frame of the incident; and that individuals beyond those immediately involved would be impacted by the incident
- *When headteachers responded to the incident, they would seek to provide development, support and feedback.* In providing support, the headteachers demonstrated a considerable interest in a holistic approach to supporting both individuals and the organisation:

Headteachers would seek to support individuals beyond the immediate incident, and they would look at developmental needs of those involved

### The Role of Others in the Incident

Headteachers within the individualist stage would seek to deeply involve others in the understanding and response to the incident. Also, the headteacher would seek to use the incident to develop those around them. This development would not be sporadic and instead be part of a pre-determined developmental plan.

- As already outlined, headteachers would look to build their understanding of the situation with those around them in a mutual fashion. Headteachers within that stage would seek out a wide range of individuals to contribute to the understanding or response to the incident; the headteacher would seek to operate regardless of hierarchy – those were involved based on their proximity to those involved, to the incident itself or their ability to offer a different perspective.
- Headteachers within this stage group sought to ensure that those around them understood the situation. Headteachers would achieve this through sharing the rationale for action and how headteachers would often share their thinking process as it evolves through discussion.

In addition, headteachers would purpose those around them to explore how others might interpret their messages, communications or approach. This recognises how individuals operate to read and interpret situations differently

- Headteachers would use the incident to support the ongoing development of their staff. These headteachers are interested in the development of their staff; there is usually some informal or formal plan. Also, headteachers within this stage group can see beyond supporting individuals within the situation itself: they can make use of the immediate situation to feed into the wider development of the individual.

### The Handling of Feelings

Headteachers within the individualist stage saw emotion as a part of the incident. Headteachers would seek to empathise with those around them, enquiring and discussing the feelings that were consequently stirred up following this incident. In addition to considering the incident itself, the headteacher showed interest in the well-being of those involved to provide context to the individual and their position within the incident.

- Headteachers provided the space for those around them to express their emotional response to an incident, providing a safe space for those around them to express their feelings.
- Headteachers within this developmental group would seek out the emotional well-being of others; these headteachers would regularly inquire as to how those are 'within themselves'. Moreover, headteachers were going beyond the emotional response and enquiring about overall well-being.

### How Others Experienced the Headteacher

Those around the headteacher would imply a deep relationship with their headteacher. Those around the headteacher would describe the impact the headteacher had on how they made people feel.

- Those around the headteacher would describe how the headteacher had a direct impact on them as individuals that went beyond the surface level. “They made me feel listened to” as oppose to “they are listening”.
- Those around the headteacher described their headteacher as someone able to read and interpret the situation with a high degree of accuracy. Often, those around the headteacher would claim the headteacher can see into the incident that others cannot.
- What is clear though is these headteachers are not using intuition alone. Their communication plan is thought through and checked with others. They proactively engage a wide range of individuals in both the response and understanding of the task. In achieving an understanding of the task, they work in a collaborative manner that seeks to co-construct their understanding of the incident. Empathy itself is a strong theme. Therefore, the emergence of “getting it”. As a theme, is a direct consequence of how the headteacher consistently makes sense of their environment in an interdependent fashion.

### Summary

Headteachers within the individualist stage handled complex tasks in a significantly unique fashion compared to other stages. In coming to understand a situation, headteachers involve a wider range of individuals. Headteachers will decide to involve others based on their ability to offer insight and not their seniority or position within the school hierarchy. The headteacher seeks to work with their co-workers in a genuinely mutual fashion; they seek to co-construct an understanding of the situation with those around them, sharing their rationale and how this understanding evolves with each interaction. Furthermore, in understanding and responding to the situation, headteachers within the individualist stage appreciate the unpredictable, interconnected nature of organisational life; they show interest in what’s comes before and how both the situation itself (and their actions) in response will ‘ripple’ across the organisational landscape both now and in the future. A deep, empathetic understanding characterised the relationships held by these headteachers; those around the headteacher will comment how their headteacher can understand the situation in ways that others cannot do. This is likely to be underpinned by their nuanced approach to communication and how they mutually work with others.

*Appendix 7: Coding Tree from First to Second Cycle Coding*

<u>First Cycle</u>	<u>Second Cycle</u>
<b><u>Thoughts</u></b>	
<b>Policy</b>	
POLICY: It's MY School policy"	POLICY: It's MY School policy"
POLICY: Fairness...Guidelines	POLICY: Fairness...Guidelines
POLICY: What are the underlying principles	POLICY: What are the underlying principles
POLICY: What's the rules	POLICY: What's the rules
<b>Complexity</b>	
<u>"rationality"</u>	COMPLEXITY: WHATS THE LOGIC
COMPLEXITY: What's the logic	
COMPLEX: Change is complex	COMPLEXITY: Explicit statement that situation is complex
cog to problem solve, I need others.	
awareness of complexity	
COMPLEX wider institution	COMPLEXITY: Reference to beyond the immediate situation - consequences, outcomes, history etc.
cog what happened before this	
values questioning what is the right thing	
cog assessing wider outcomes	
value what's best for the school	
belief well-being important	
cog holistic	
exp big picture	
sps what's the consequences	
cog assessing wider implications	
COMPLEX: Beyond the now + wider	
Judgement	
cog interpret evidence to meet value judgement	
Imposing own understanding of situation	
SUPPORT&HELP: What's the diagnosis	COMPLEXITY: Draws on experience from past
cog involving past experience	
sps draws on experience/advice	COMPLEXITY: "What's really going on here": refusal to accept at face value
trying to find meaning	
COMPLEX WHAT AIS GOING ON LETS GO DEEP	COMPLEX: Linearity
COMPLEX: Linearity	
COMPLEX Wide but Limited	COMPLEX Wide but Limited

COMPLEX: Narrow SPS - ignoring evidence	COMPLEX : Only refers to immediate situation
COMPLEX: Patterning	COMPLEX: Patterning
COMPLEX: There are a lot of variables	COMPLEX: Explicit Ref to Many/Multiple/Conflicting Variables
COMPLEX: Many Variables	
COMPLEX Reductionist	COMPLEX Reductionist
COMPLEX Worried about future controlling impulse	COMPLEXITY: Getting this right in long term
SUPPORT&HELP: How do we get this right in long term	
COMPLEX: Not flexing	COMPLEX: Not flexing
COMPLEX What's going on within incident	COMPLEX What's going on within incident

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<b>Organisation</b>	
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cog do they know how much I did for them!?	Reference to Self as MKO/Head/Hierarchy
Belief - I'm right and you don't know it yet	
cog I am the expert	
(cog) =person meeting my need, i will keep here there	
cog my way	
Belief - I'm right	
belief i have power, i can act	
belief headteachers are powerful	
Belief - I am aware, they are not, I must enlighten them	
Belief - i have insight you do not have	
belief - i know	
belief my knowledge is my credibility	
belief i can make a difference	
belief I'm doing a better job for your son	
belief I have more knowledge	
belief success is getting my way	
belief i must save them	
cog i have power, i can act	



HIERARCHY: Distribution	HIERARCHY: Distribution
HIERARCHY: Mutuality	HIERARCHY: Mutuality
<b>On responding to the Situation</b>	
sps task orientated	Task Orientated
sps assumption of others wishes	"Assuming Needs of Others"
"I know what you are thinking"	
cog values influencing decision	Value/Action Alignment
"values must align to action"	
(Cog) What is the situation	What is the situation
What's the situation	
"How would others interpret this"	"How would others interpret this"
sps taking time	Think before Speaking/Reflection
cog i like to practice/process	
cog think before speaking	
sps self talk	
SPO - REFLECTING	
"I must think"	Must Respond Immediately
cog think before speaking	
"i had to act"	
self-aware..but unable to impulse control	
cog cant help but react	
cog discussing this is getting in way of them acting	
belief When its wrong, i must act	
"Action"	I must save them
cog i must save them	
attitude poor kids, they need saving	
values - I must do the job properly	
value i give myself to it	
belief my values are the right values	
values my moral mission to sort this out	
sps im helping	
"I want to help"	
"what do we need to in order to help	
"welfare of most vulnerable"	Priority of the person as a holistic individual
value keeping children safe	

values people matter	
value child comes first	
value this is a person	
Children deserve this	
cog adapting	Adapting
exp adaptable	
cog what do i need to be here	
cog information adapt to context	
<b>On Others</b>	
emotion blame	emotion blame
Other - "It doesn't matter what I think"	Other - "It doesn't matter what I think"
INVOLVE OTHERS "Who should we involve and why"	INVOLVE OTHERS "Who should we involve and why"
"what are their values?"	"what are their values?"
value what do others need of me	value what do others need of me
beliefs people are practical uses	beliefs people are practical uses
values what others think will matter	values what others think will matter
belief must make others believe I'm good	belief must make others believe I'm good
INVOLVE OTHERS "how do i need to approach this individual"	INVOLVE OTHERS "how do i need to approach this individual"
<b>Handling Emotion</b>	
Emotion Drives Action	Emotion Drives Action
Within Person - Key Driver for Action	
cog dealing with emotion	Recognition of Feelings of Others
ROLE OF EMOTION: Recognition of feelings	
ROLE OF EMOTION Recognition of Emotion	
ROLE OF EMOTION: Not good for decisions	Avoiding Emotion
cog avoid emotional attachment	
SPS manages others emotions	
sps manages own emotion	
sps proactively avoiding emotion	
ROLE OF EMOTION: Must Control	

ROLE OF EMOTION: Share	ROLE OF EMOTION: Share
ROLE OF EMOTION: Ask others	ROLE OF EMOTION: Ask others
ROLE OF EMOTION: Stress is ok/normal/part of life	ROLE OF EMOTION: Stress is ok/normal/part of life
ROLE OF EMOTION: Strategic management (not denial)	ROLE OF EMOTION: Strategic management (not denial)
Need calm	Need and Remain Calm
" I must maintain calm"	
STYLE: "I know about the emotion, tough, but still" ....	Emotion not influencing decision
ROLE OF EMOTION: Not influencing decision	
"how could they be feeling right now"	Empathy
On Themselves	On Themselves
Self Doubt	Self Doubt
<b><u>Action</u></b>	
<b>How they collect information</b>	
SPS collaborating	Collaboration
INVOLVE OTHERS co-collaboration	
SPS Head Leading Conversation	SPS Head Leading Conversation
COMPLEX seeking immediate	COMPLEX seeking what happened just within the incident
sps involve wide range of people	Seeking outside perspectives
sps pulls on others	
COMPLEX seeking outside	
SUPPORT&HELP: Establish concern	SUPPORT&HELP: Establish concern
SUPPORT&HELP: establish diagnosis	SUPPORT&HELP: establish diagnosis
Information Gathering: Within Jedi Council	Private, select council - Jedi Council
INVOLVE OTHERS: Jedi Council	
INVOLVE OTHERS: Dialogic conversation	INVOLVE OTHERS: Dialogic conversation

INVOLVE OTHERS: Tolerated Discussion	INVOLVE OTHERS: Tolerated Discussion
INVOLVE OTHERS: Appease	INVOLVE OTHERS: Appease
INVOLVE OTHERS: Avoid confrontation	INVOLVE OTHERS: Avoid confrontation
Information Gathering: Across Organisation	Information Gathering: Across Organisation
Avoid Conflict	Avoid Conflict
Information Gathering: In Supporting Role	Information Gathering: In Supporting Role
Information Gathering: Active Listening	Information Gathering: Active Listening
INVOLVE OTHERS	INVOLVE OTHERS
sps selective listening	sps selective listening
Information Gathering: From All Those Directly Involved	Information Gathering: From All Those Directly Involved
Outcome	Outcome
SPS Asking questions	Asks a lot of questions
(Cog) don't know problem, must ask questions to find answer	
Information Gathering: What's the background	Information Gathering: What's the background
Information Gathering: Evidence/Data	Information Gathering: Evidence/Data
Information Gathering: "What do you think"/informal insights	Seeking informal insights/sensing
SPS sensing	
Information Gathering: Reasons	Information Gathering: Reasons
Information Gathering: "How are they within themselves"	Information Gathering: "How are they within themselves"
Read differently	Read differently
<b>To Plan/Planning Stage</b>	
SPS - Head decide action points	SPS - Head decide action points
SPS pre-meditated action	SPS pre-meditated action
Inconsistent Process	Inconsistent Process
SPS Did not share thoughts behind action	

SPS internal thinking process	Thinking/rationale behind actions not shared
Private Thinking	
INVOLVE OTHERS: Sharing Rationale	Sharing Rationale
SPO Presenting Evidence	
cog must explain my ideas	
INVOLVE OTHERS Coconstruction	INVOLVE OTHERS coconstruction
INVOLVE OTHERS "What do you think"	INVOLVE OTHERS "What do you think"
cog collaborating to tweak my plan	cog collaborating to tweak my plan
INVOLVE OTHERS Validating Idea	INVOLVE OTHERS Validating Idea
WORKING WITH OTHERS; Providing template/sandbox	WORKING WITH OTHERS; Providing template/sandbox
INVOLVE OTHERS How could others view this	INVOLVE OTHERS How could others view this
SPS - seeking social agreement	Seeking social agreement
INVOLVE OTHERS: Sharing values to others	INVOLVE OTHERS: Sharing values to others
(cog) "We've already helped told her what to do and not done"	Staff must comply
belief staff need to be in line	
Compliance with Expectations	
sps same values	Value Alignment
INVOLVE OTHERS: Value alignment	
<b>To Intervention</b>	
STYLE: Contingent on situation	STYLE: Contingent on situation
sps conflict resolution	sps conflict resolution
"I Must help"	"I Must help"
COMPLEX Decision made on own	COMPLEX Decision made on own
INVOLVE OTHERS: Cooperation/Transaction	INVOLVE OTHERS: Cooperation/Transaction
INVOLVE OTHERS Delegate to responsibility and leadership	INVOLVE OTHERS Delegate to responsibility and leadership

INVOLVE OTHERS Communicate expectation	INVOLVE OTHERS Communicate expectation
How they will support and help others	How they will support and help others
<u>Manipulation</u>	Leverage/Manipulation of Others/
cog collaborating to get what i want	
cog playing a game to achieve outcome	
sps empathy as a tool	
sps pulls on personal situation	
"understanding people to get what I want"	
sps leverage/manipulation	
INVOLVE OTHERS: Leverage	
INVOLVE OTHERS: Accountability	INVOLVE OTHERS: Accountability
INVOLVE OTHERS: Feedback	Development of the person/coaching/providing feedback
Developing The Person	
sps developing others	
SUPPORT&HELP: Coaching	Provide Support
SPS- provide support	
SUPPORT&HELP: Customer	
SPS - "Saying it like it is"	SPS - "Saying it like it is"
SUPPORT&HELP: Everyone	SUPPORT&HELP: Everyone
POLICY: Uses policy	POLICY: Uses policy
POLICY: 'Applies' rule of policy	POLICY: 'Applies' rule of policy
<b><u>EMOTION</u></b>	
emotion nervous	Anxiety
Within Person - Anxiety	
Anxious	
Other - Frustration	Frustration/Panic
Frustration	
Within Person - Panic	
Panic	
Within Person - Agitated	Frustration/Anger/Outburst/Swearing
emotion irritated	
emotion frustration	
emotion anger	
sps emotional outburst	

emotion outburst scream swear	
Within Peron - Sulks	Within Peron - Sulks
Within Peron - <miserable	Within Peron - miserable
Other - Judged	Feeling Judged/Needing to be Defensive
Other - Defensive	
unfiltered emotion	unfiltered emotion
emotion relief	emotion relief
emotion neutral	emotion neutral
emotion "found this hard"	emotion "found this hard"
emotion empathy	emotion empathy
emotion preference	emotion preference
emotion upset	emotion upset
other talks from the heart	Extroverted Expression of Emotion
SPS - express emotion	
<b><u>Experienced</u></b>	
exp calm	Calm
exp can reassure	
EXPERIENCED: Calming	
Keeping everyone calm	
other he resonant with me	Empathy
exp empathetic	
empathy	
exp she has our back	Supportive
supportive	
exp empowering	Empowering/Magical/Awe
exp eating out of your hand	
"awe"	
magical	
exp generates negative emotion	exp generates negative emotion
exp we all own this vision	Collaborative
exp people are there to collaborate	
diplomatic	
exp collaborative	
exp believable	HONEST
HONEST	

exp non confrontational	exp non confrontational
exp she doesn't respond to emotion	exp doesn't respond to emotion
"open book"	"open book"
exp very open	
exp aggressive	exp aggressive
exp thinks before talking	exp thinks before talking
exp internal thoughts	exp internal thoughts
exp doesn't think a lot	exp doesn't think a lot
exp as a charismatic leader - talks first, shouts loudest	Expressive
extroverted	
exp opportunistic	opportuinitistic
value as opportunity arises, take it	
exp disagree	dismissive
Exp dismissive	
exp she listens a lot	exp she listens a lot
"could be a very clever politician"	"could be a very clever politician"
exp decisive	exp decisive
cog external drivers	cog external drivers
exp research/hard work	thinks about the problem
exp clever	
exp philosophical	
exp solution focused	pragmatic
exp pragmatic	
exp patient	patient
exp warmth	warm qualities
exp caring/supportive/a teacher	
exp friends	
exp protective	
exp huge heart	
"makes me feel" I am cared for I feel listened to I am valued I am heard	qualities + describing affect on them