

# Master Thesis U.S.E. International Management

## Interim Management and the Viability of Upper Echelons Theory

The Effects of Interim-Manager Characteristics on Performance

**ABSTRACT:** Individual characteristics of interim managers have been under examined in Interim Management research. In order to fill this gap, this research has, for the first time, applied the viability of Upper Echelons Theory to Interim Management.

The literature offers clear similarities and appears to point into the direction of an applicability of Upper Echelons Theory to Interim Management. In order to investigate, 4 characteristics from Upper Echelons Theory were identified and researched: Experience in the Field, International Experience, Tenure and Age.

Data from the context of football was gathered and analysed (n=136). Based on the results, appointing an interim manager had a clear, positive, significant effect on Performance. None of the interim manager characteristics however were significant in predicting Performance.

We conclude that the appointment of an interim manager has a positive effect on Performance, but this is not due to individual characteristics. These results negate the viability of Upper Echelons Theory on Interim Management. Interim Management appears to be too different to be encapsulated by the template of Upper Echelons Theory.

**KEYWORDS:** UPPER ECHELONS THEORY, INTERIM MANAGEMENT

30-06-2022

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## Introduction

Interim managers are independent managers that are temporarily employed in order to bridge a period between old and new management (Bach, 2015). They are often brought into an underperforming firm, in order to make an immediate overhaul and accomplish change (Goss & Bridson, 1998). With an increase in the appointments of interim managers around the world (Worldwide Interim Leadership Group, 2019), the research on Interim Management has lagged somewhat behind. Though research indicates that the appointment of an interim manager leads to better Performance (Kleinknecht et al., 2006), the impact their personal characteristics have remains obscure (Woods et al., 2020).

Although they have started to appear in every industry imaginable; whether it be as the police chief in Ottawa (Ottawa Citizen, 2022), the CEO of General Motors (Bloomberg, 2022), or even the chairman of Congress in Niger (This Day, 2022), limited research has been done into the factors that make an interim a success or a failure (Isidor et al., 2014). Due to their increased global presence, it is vital to get more insight into these factors, and the impact interim managers have on Performance.

Interim Management started in the Netherlands in the 1970's, and was intended to urgently, and temporarily, fill a vacancy (Goss & Bridson, 1998), to either bring about change (Reijniers, 2007), or reconstitute calm in an organisation (Greiner et al., 2005). Except for a brief period during the financial crisis of 2008, interim managers have increasingly been utilized around the world, transforming the nature of employment in the process (McGovern & Russell, 2001). It has become the 21<sup>st</sup> century answer to an increasingly dynamic and interconnected professional landscape, in which companies are faced with unique and unforeseen situations (Bruns & Kabst, 2005; Vousden, 2002). In the uncertain and progressively unpredictable professional climate, in which flexibility in both skills and contracts is needed, interim managers have become an increasingly opted form of employment (Inkson et al., 2001; Marica, 2021). Although hard numbers are difficult to get by, they all suggest Interim Management is becoming more widespread (Forbes, 2022; PagePersonnel, 2014).

Although interim managers have been around for some time in an increasing fashion, it is not entirely clear when they are worth it, and when they are not. Research has found that interim managers are more likely to innovate, increase productivity and boost Performance (Kleinknecht et al., 2006), that they are more skilled in adapting to unforeseen circumstances (Bruns & Kabst, 2005), and are generally more willing to go above and beyond to get the job

done (Valverde et al., 2000). But the literature remains in the dark pertaining which factors influence the chances of success of an interim manager. There remains a gap “*in research about the individual characteristics of effective interim leadership*” (Woods et al., 2020, p. 3).

This research has tried to fill this gap by, for the first time, applying Upper Echelons Theory to explore interim manager-specific characteristics that impact Performance. Although used in a lot of management research, Upper Echelons Theory has, to the best of our knowledge, not been used in relation to Interim Management research. Our goal in this research was twofold, firstly, to test the viability of Upper Echelons Theory as a template, and secondly to identify individual characteristics from the Upper Echelons Theory that impact the Performance of interim managers.

After matching both Upper Echelons Theory and Interim Management literature, there appears to be a foundation for an application of Upper Echelons Theory to Interim Management. In order to test the viability, firstly, an effect of the appointment of an interim manager on Performance needs to be established. This resulted in the first research question:

*Research Question 1: How does the appointment of an interim manager affect Company Performance?*

Secondly, we need to test whether characteristics from the Upper Echelons Theory are, in fact, applicable to Interim Management as well. In order to test this, the second research questions poses:

*Research Question 2: How do interim manager characteristics influence Company Performance?*

Based on Upper Echelons Theory literature, four key characteristics were identified: Experience in the Field, International Experience, Tenure and Age.

Given the high frequency of interim manager appointments, comparability of Performance, availability of data and direct and immediate effect of an interim manager on strategy, football was selected as the context for this research. Data on performance and interim manager characteristics was collected in 3 competitions, spanning 6 seasons, 69 teams and 186 interim manager appointments. The analysis of this data is used to answer the research questions.

In summary, this research contributes to Interim Management research in an important way. The gap in the literature on Interim Management, and the need to provide interim managerial characteristics as predictors for Performance, might be filled using Upper Echelons Theory.

An applicability of the Upper Echelons Theory would immediately offer Interim Management research a template to further test and investigate managerial characteristics as important instruments. On top of that, it would offer companies tools to use in the hiring of interim managers.

This study has tested the feasibility of Upper Echelons Theory on Interim Management by (1) doing an expansive literature review, matching the Upper Echelons Theory with existing Interim Management research; (2) hypothesising 4 relationships between interim manager characteristics and performance; (3) gathering data in the context of football; (4) analysing this data in order to answer the research questions; (5) providing a definitive answer pertaining the viability of Upper Echelons Theory on Interim Management; and (6) identifying limitations and avenues for future research.

## Literature review

In order to understand the implications interim managers have in an organisation, this research has tried to utilize Upper Echelons Theory (UET). This theoretical framework, and its implications will first be explained. A literature review was subsequently done in order to understand the specifics of Interim Management. Ultimately, both Upper Echelons Theory and Interim Management literature were combined to form our hypotheses.

### Upper Echelons Theory

The Upper Echelons Theory was first described by Hambrick & Mason in 1984 and tried to connect personal characteristics of executives to strategic choices and Performance. Their main thesis is that organisational outcomes (i.e. Performance) is directly affected by (personal) characteristics of top executives (Hambrick & Mason, 1984). Initially, UET focussed on Top Management Team appointments, as it assumes that top executives diametrically affect strategy, which in turn impacts the (organisational) outcomes and Performance of the company (Hambrick, 2007; Hambrick & Mason, 1984; Waldman et al., 2006). UET presumes that these top executives make (strategic) decisions based on their own experiences, values, personality, education, skill, and other (personal) factors (Đerđa, 2017; Kim, 2021). UET emphasizes that these personal characteristics lead to differences in information processing and strategic choices due to the fact that they shape their “(1) *Field of vision (where they look and listen)*, (2) *Selective perception (what they actually see and hear)*, and (3) *interpretation (how they attach meaning to what they see and hear)*.” (Hambrick, 2007, p. 337). Combining the aforementioned notions, Upper Echelons Theory states that the (personal) characteristics of top executives directly influence an organisation’s Performance.

From its inception in 1984, research into the UET has expanded, from its initial focus on solely Top Management Team appointments, to a wide array of appointments and contexts, including managers in different layers of the company, as well as differences in company size, varying from managers in small, highly local businesses, to CEO’s of large, multinational organisations (Carpenter et al., 2004a). Research has found UET to be broadly applicable, and established company outcomes to differ, depending on, amongst others, manager experience, international experience, tenure and age (Carpenter et al., 2004a; Fox & Schuhmann, 1999; Kim, 2021; Waldman et al., 2006). Even though the Upper Echelons Theory has expanded and has since become a broadly accepted framework to investigate the effects of appointments

in management throughout an organisation (Neely et al., 2020), it has rarely been applied to Interim Management appointments .

This research will try to apply the Upper Echelons Theory on Interim Management. At first glance, this theory seems to be applicable due to the fact that Interim Managers (just like Top Management Team members) directly affect strategy and thus Performance and bring with them their own personal characteristics and experience, influencing their (strategic) decision making processes. In previous research on the Upper Echelons Theory, this has however rarely been done, and it is, as of yet, uncertain whether this will be viable.

### Interim Management

Interim Management is defined as “*the engagement by an organisation of an independent executive within the middle to senior management band for a limited and usually fixed period of time*” (Goss & Bridson, 1998, p.37). These ‘interims’ are often hired in cases of rapid changes in the business environment or in times of poor Performance (Goss & Bridson, 1998). They are appointed with the explicit idea of accomplishing change, and bridging the period between the old ineffective management, and the new, hopefully successful, management (Bach, 2015). Goss & Bridson (1998) state that interim managers provide immediate access to skills, expertise and experience, and provide a ‘breath of fresh air’ in an underperforming organisation.

Jas (2013) states that interims are simultaneously viewed as both insiders and outsiders to a company, which gives them a unique status. In tandem with the temporal nature of their employment, this allows them to make difficult changes in a company without having to consider the long-term impact on how they, as a person, are perceived (Jas, 2013). Their appointment is meant to provide stability during the search for new management, but may also be used in order to test an interim as a potential permanent replacement (Travis Maynard et al., 2017).

In Upper Echelons Theory, the first key assumption states that an executive has a direct effect on Performance by creating strategy (Hambrick & Mason, 1984). Similarly, an interim manager is normally appointed with the explicit idea that they can turn around a badly performing company (Goss & Bridson, 1998). They are purported to do this by offering continuity in the absence of leadership, and making immediate, structural changes to upend crisis and distress (Reijniers, 2007).

Secondly, Upper Echelons Theory states that the (personal) characteristics of executives shape (strategic) decision making processes (which consequently influences Performance) (Hambrick, 2007; Hambrick & Mason, 1984). Companies hiring interim managers often look for specific personal characteristics in an interim manager as these supposedly influence their expertise and skills, e.g. prior experience and firm-specific knowledge (Goss & Bridson, 1998). In line with UET, there exists the assumption that interim characteristics affect Performance, but this remains to be an under researched phenomenon (Bruns & Kabst, 2005). Woods et al., stated that, as of 2020, there remains a gap pertaining the personal characteristics of interim managers, which needs to be further researched.

Until now, no comprehensive fulfilling framework has been applied to personal characteristics in Interim Management research. By applying Upper Echelons Theory, and combining it with existing research on Interim Management, this research aims to introduce Interim Management into the Upper Echelons Theory and fill the gap in the literature with regards to the influence of Interim Management characteristics on Performance. In order to systematically test the validity of the Upper Echelons Theory on Interim Management, two research questions were designed.

## Performance

As stated in Upper Echelons Theory, executives have a diametric impact on Performance due to their impact in strategic decisions (Hambrick & Mason, 1984). We suppose that interim managers affect Performance in the same way, as a result of their immediate responsibility of overhauling a (perceivingly) underperforming company (Bach, 2015). Changes in Performance upon Interim Management appointment would be clear proof that interim managers indeed have an impact on Performance, and would be the first step in proving the applicability of Upper Echelons Theory to Interim Management. This has led us to the first research question:

*Research Question 1: How does the appointment of an interim manager affect Company Performance?*

Research into Interim Management has found that interim managers improve organizational Performance on the short term (Jas, 2013). Further research found that they make a short-term overhaul to ensure a sustainable long-term benefit (Inkson, Heising & Rousseau, 2001). They accomplish this positive change due to them questioning established knowledge (Isidor et al.,



2014), transforming the organizational culture (Urbaniec, 2022), and exposing and resolving tensions (Rubin & Ohlsson, 2022).

Although interim managers are more and more frequently used (Isidor et al., 2014; Vousden, 2002), research has not been universally positive on their influence on company results. Skowron-Mielnik & Sobiecki found that the influence of an Interim Management appointment on effectivity greatly varies per interim manager, and is not invariably positive (Skowron-Mielnik et al., 2020). Moreover, due to the limited period of involvement of the interim manager, the long-term vision and execution of strategy might be severely restricted (Isidor et al., 2014).

Interim managers are appointed with the explicit intention of bringing about change, and positively affect Performance. The rise in the number of interim appointments suggests that Interim Management is effective in bringing about this change. Although the academic literature is not conclusive, and the impact of an interim on Performance varies across literature, we expect an effect of Interim Management appointment on Performance, in line with Upper Echelons Theory. Based on the literature we hypothesise a positive effect of interim manager appointment on Performance. This has led to the first hypothesis:

*Hypothesis 1: Interim Management appointment will positively affect company Performance*

### Managerial Characteristics

Upper Echelons theory states that executive characteristics influence a company's Performance (Hambrick & Mason, 1984). Similarly, Interim Management research states that interim managers are brought into organisations in moments of rapid change or poor Performance, and they bring along their own set of personal characteristics (Goss & Bridson, 1998; Woods et al., 2020). As they are hired, their own personal construals of (strategic) situations, their approach to solving the issues at hand and strategic decisions become integral to the company (Kim, 2021). These characteristics offer them a unique position to handle interim assignments.

As both Upper Echelons Theory and Interim Management research point towards manager characteristics as a factor in success by means of strategic choices and decisions, research question 2 was thusly formulated:

*Research Question 2: How do interim manager characteristics influence Company Performance?*

In order to answer this question and test the validity of Upper Echelons Theory on Interim Management several characteristics from UET were identified based on the literature and applied to Interim Management.

Experience

One of the major characteristics in Upper Echelons Theory that impact organisational Performance is prior experience (Hambrick, 2007; Kim, 2021). Experience provides executives with the knowledge and values needed to judge and decide on strategic challenges (Wang et al., 2016). This is due to increases in 'sensemaking' and problem-recognition (Combe & Carrington, 2015), utilization of mental models (Hedlund et al., 2003), and expertise (Neely et al., 2020).

We will explore experience, and its influence on Performance, in three parts: Experience in the field, International experience and Tenure.

*Experience in the field*

Experience in the field, in Upper Echelons Theory entails the experience a manager has in working in the industry of the company of appointment in in the same capacity or with similar responsibilities (Awa et al., 2011; Carpenter et al., 2004a; Zhang, 2008). In Upper Echelons Theory, this type of experiences is thought to provide executives with a template for identifying and evaluating problems and solutions (Wang et al., 2016), enhance competence (Zhang, 2008) and increase information processing capabilities (Wang et al., 2016), leading to an increase in Performance.

In Interim Management research, having prior experience in the same field of profession has also been found to aid in enhancing organisational Performance (Lewis et al., 2014). In their research, Lewis et al., (2014) found that this type of experience was linked to expertise, and helped managers achieve higher levels of profit due to their knowledge of the industry. Furthermore, experience in the same field can lead to earlier problem-recognition, more informed decision-making and better strategy implementation (Hutchinson et al., 2014).

Research from Blank & Hadley (2021) suggest that managers with experience in the field, are better equipped to handle crisis situations. This is supported by Mom et al. (2015) that found

managers with previous experience in the field were more prone to exhibit ambidextrous leadership, as well as reduce uncertainty for employees (Mom et al., 2015). Hamori & Koyuncu (2015) found the inverse to be true; experience in the field, in a similar position, was negatively related to firm Performance due to the non-transferability of (job-specific) human capital (Bencsik et al., 2019; Hamori & Koyuncu, 2015).

The literature on Interim Management, and the Upper Echelons Theory seem to be compatible. Despite the possible non-transferability of human capital, we suspect that, due to the added expertise, problem-recognition, and enhanced competence, prior experience in the field aids an interim manager in achieving better Performance. This leads us to the following hypothesis:

*Hypothesis 2: Interim managers with more experience in the field, perform better than interim managers with less experience in the field*

#### *International experience*

Upper Echelons Theory has, since its inception, evolved to include more personal characteristics, one of these newly relevant characteristics is International Experience (sometimes also called international tenure) (Abatecola & Cristofaro, 2018). International experience denotes the amount of experience a manager has in other countries than the company's domesticity (in the same job or with similar responsibilities) (Hutzschenreuter & Horstkotte, 2013; Lin & Liu, 2012). Prior international experience is important for executives in order to identify international opportunities and threats, even in cases of no international operations (Wang et al., 2016). In unfamiliar situations, internationally experience executives are better prepared to deal with challenges (Daily et al., 2000).

Research in Interim Management has found that the availability of a manager with international experience increases the competitive advantage (Đerđa, 2017). The positive influence of international experience is not solely valid in highly international companies, but appears to also be effective in more locally oriented companies (Carpenter et al., 2004a; Đerđa, 2017). Managers with international experience are better in understanding global markets and identifying opportunities due to their more diverse business practice, this boosts Performance, but evidence suggests that this international experience needs to exceed a certain threshold before this becomes significant (Cannella et al., 2008; Schmid & Dauth, 2014). Furthermore international experience adds a source of information the company can

rely on (Athanassiou & Nigh, 2002), augments experimentation and innovation and positively influences both short and long-term Performance (Đerđa, 2017).

Both Upper Echelons Theory and Interim Management research appear to be in line with regards to an influence of International Experience on Performance. Due to their added augmented knowledge in global markets, identification of opportunities, combined with their higher inclination to experiment and innovate, we project international experience to be positively correlated with Performance. This has led us to the following hypothesis:

*Hypothesis 3: Interim managers with more international experience, perform better than interim managers with less international experience*

### *Tenure*

In Upper Echelons Theory, Tenure is seen as the period in which the executive has been employed in the company in which they become an executive (Abatecola & Cristofaro, 2018). According to Finkelstein et al. (2009), Tenure is one of the most researched executive characteristics in Upper Echelons Theory. In contrast to other executive characteristics however, Tenure has been found to have differing effects on Performance with Wang et al. (2016) stating: “Scholars have found, for example, that tenure [...] is positively (McClelland, Liang, & Barker III, 2010), negatively (Nadkarni & Hermann, 2010), or not related (Balkin, Markman, & Gomez-Meija, 2000) to firm Performance” (Wang et al., 2016, p. 778)

In UET, a positive effect of Tenure on Performance is explained through an increase in executive autonomy (and a decrease of outside pressures on the executive) (Miller, 1991), more confidence in decision making processes (Wang et al., 2016), and continuations of proven strategies (Prendergast & Stole, 1996). On the other hand, higher tenured executives appear to be more stuck in their ways (Miller, 1991), less prone to act (Matta & Beamish, 2008), and less likely to be surrounded by critical voices (Acharya & Pollock, 2013), leading to lower levels of Performance. One of the benefits of an executive with high tenure in UET revolves around continuations of previously proven strategies (Prendergast & Stole, 1996), but in the case of the appointment of an interim manager, this is usually not a valid strategy, as interim managers are often brought in because the existing strategy is not working, and there needs to be an overhaul.

In Interim Management Research, the influence of tenure on Performance is also contradicting. One body of research found that a longer tenure of a manager leads to better

Performance. This was due to higher conformation to industry tendencies in strategy; this caused the Performance of the company to closely follow the industry Performance (Finkelstein & Hambrick, 1990). Higher tenured managers are thus considered to be a useful interim alternative, in case of an underperforming firm (such as is often the case, in case of the appointment of an interim manager). Higher Performance amongst longer tenured managers was attributed to a better strategic posture and long term vision (Carpenter & Fredrickson, 2001; Tihanyi et al., 2000).

Other research found the relationship between tenure and Performance to be shaped like an ‘inverted U curve’ (Souder et al., 2012). As an appointment is new, the influence of a manager is (relatively) low, and the effect of the manager on Performance is small as he struggles to implement changes; after the manager has gotten to know the organisation, he can effectively bring about change, instigate overhauls and affect Performance due to his know-how and human capital within the organisation; but if a manager has been tenured for a long period of time, he is more stuck in his ideas and ways, and it becomes more difficult to change course or direction (Henderson et al., 2006; Simsek, 2007; Souder et al., 2012).

Interestingly, both the Upper Echelons Theory and Interim Management research are inconclusive with regards to the effects of Tenure on Performance. Although UET research varies with regards to short term effects of tenure on Performance, Interim Management research found overwhelming evidence in favour of a positive short-term effect. On the other hand, the constraints put upon tenure on Performance in UET revolve around long term lethargy and failures to act, which also comes forward in Interim Management research as managers being stuck in their ways.

The research done on Tenure in the Upper Echelons Theory and on Interim Management is indecisive, but appears to point towards an initial positive effect of Tenure on Performance. However, as tenure increases, the theories vary in their expectation. Although higher tenured managers lead to more industry consistent strategies and subsequently Performance, we suspect that the appointment of an interim manager with a very long tenure will be ineffective in changing direction due to the fact that they are more likely to be stuck in the ways of the company/industry. This has led us to the following hypothesis:

*Hypothesis 4: The impact of interim manager tenure on Performance is shaped as an inverted U curve*

## Age

Aside from experience, Upper Echelons Theory also offers up Age as a personal characteristic of managers that affects Performance (Hambrick & Mason, 1984). In their original theory, Hambrick & Mason (1984) stated that younger executives take more risk, and are more assertive in their strategic choices (Hiebl, 2014; Yim, 2013). On the other hand, older executives have more developed cognitive schemata (Wang et al., 2016), which lead to more informed decisions on one hand (Ali et al., 2022), but also results in a more rigid, lower likelihood for innovation and information processing (Serfling, 2014).

In Interim Management research, there is a lot of evidence suggesting that young managers lead to organisational growth and better Performance (Child, 1972). Ameer & Khan (2020) found that younger managers are more likely than older managers to adopt a more holistic approach to maximizing economic Performance. This can be explained by a higher inclination to search for and respond to new information, as well as overall more strategic decision making (Streufert et al., 1990).

Contrary evidence has also been found. Zacher et al. (2015) stated that with age, comes better leadership. They found that a higher age of a manager led to higher task competence, effectiveness, and better interpersonal skills, resulting in enhanced leader-follower relationships (Zacher et al., 2015). Li Jun-Shan et al. (2022) also found this effect, but they state that this was likely due to the high correlation between experience and age, and when correcting for experience, age did not have a significant impact on enterprise Performance

In both Upper Echelons Theory and Interim Management research, effects of Age on Performance are found. Although research has found effects of age on Performance in both directions, most evidence that points in the direction of a positive effects, ascribes this to an increase in experience. When incorporating, and correcting for, experience in the model, such as is done by including hypotheses 2, 3 and 4, we assume the effect of age on Performance to be negative due to their more holistic approach and higher inclination to respond to new information. This has led us to the fifth and final hypothesis:

*Hypothesis 5: Younger interim managers perform better than older interim managers*

## Methods

The chosen methodology to answer the research questions pertained a quantitative analysis. In order to comprehensively analyse the impact of interim-manager appointments on Performance, an industry needed to be identified where Performance is quantifiably measurable, interim-managers are frequently appointed, they have a direct impact on Performance, and where a lot of data on interim characteristics is available.

### Context

A major industry, in the public's eye, where interims are often used is in football. Football is an interesting industry due to the high frequency of manager changes, leading to regular periods of Interim Management, even within clubs, within seasons (d'Addona & Kind, 2014). Furthermore, the interim managers that are appointed often have more experience as an interim, which allows for easy comparison concerning the same manager, but different companies (Desai et al., 2018). These factors allow for a lot of data points, in some cases holding circumstances similar for several factors (such as manager characteristics, and company Performance in case of multiple within season appointments).

Aside from the multitude of interim appointments, the direct effect (interim-)managers in football have on playing style, and thereby the Performance of the team, is of particular interest (Bridgewater et al., 2011; Muehlheusser et al., 2018). Another key characteristic is the quantifiability of this Performance. The Performance of football teams is clearly measurable by means of results on the field, and easily observable due to the high frequency of games and availability of data.

### Sampling

The European football market is thought to be worth around €30 billion in revenue annually (Deloitte, 2021). Research into European football is often focussed on the big-5 competitions (Premier League - England, Bundesliga - Germany, La Liga - Spain, Serie A - Italy & Ligue 1 - France). This is due to both the financial distribution as well as their (political) impact in football. Due to time constraints, this research has focussed on the three largest domestic European competitions. The three major domestic European Leagues are the English '*Premier League*', the German '*Bundesliga*', and the Spanish '*La Liga*'. The average annual revenue per club in these leagues are respectively €272 million, €176 million and €154 million (Deloitte, 2021).

The highest grossing football clubs are generally the football clubs with the biggest successes on the pitch, and sporting results directly lead to financial gains (Dima, 2015; Ruta et al., 2019). With the stakes being this high, and managers having the be-all and end-all responsibility, managers are regularly sacked if results are not up to (perceived) par. Mid-season interim manager appointments are aimed at bringing about an immediate change and (hopefully) impact the final league position, as well as their chances on trophies, consequently leading to (higher) financial gains (Hope, 2003).

Of the 58 clubs participating annually in the three top-grossing leagues (20 in both the Premier League and the La Liga, 18 in the Bundesliga), an average of around 30 manager-changes occur on a yearly basis mid-season (Transfermarkt.com). These manager-changes are often followed by (brief) periods of Interim Management. The interim-management appointments in these three leagues over the last 6 years was used, resulting in a sample of 186 interim appointment.

### Data collection

This research has looked into the effect of Interim Management appointments on Performance, and interim manager characteristics that can predict Performance. In order to comprehensively study these effects, information on both company-level (i.e., Club-level) and individual manager level was gathered. Data on club-level Performance was gathered through secondary data of football statistics websites, the primary data source was Transfermarkt.com, this information was checked and verified by comparing the data with data from the selected competition's own websites (*Bundesliga.Com*; *LaLiga.Com*; *Premierleague.Com*). For the dates, names and person-specific characteristics of interim managers and their appointments, press-releases, and Transfermarkt-, and Google-searches were combined to form a comprehensive dataset.

### Operationalization

The research questions are: '*How does the appointment of an interim manager affect Company Performance?*', and '*How do interim manager characteristics influence Company Performance?*'. In order to test this, the different variables needed to be operationalized.

### Dependent Variable

Based on the research questions and data collection, the dependent variable in this research was Performance. Although this is often difficult to measure, football was specifically chosen



because of the availability of the, in Performance analyses often used, result based measure ‘Average Points per Game’ (or PpG) (Barnett & Hilditch, 1993; Fowler et al., 2014; Mackenzie & Cushion, 2013). PpG can take on any value between zero and three, with zero being the lowest possible PpG, and three being the highest. This is an average of the number of points collected (zero for a loss, one for a draw, three for a win) over the number of games.

In order to test the Hypothesis 1, this measure was gathered for both the period prior to the appointment of an interim manager (PpG-Predecessor), as well for the period the interim manager is in charge (PpG-Interim). In order to test hypotheses 2-5, a third measure for the difference in Performance was computed: Change in Points per Game (PpG-Change) (Cronbach & Furby, 1970). This measure was calculated by subtracting PpG-Predecessor from PpG-Interim ( $PpG_{Interim} - PpG_{Predecessor} = PpG_{Change}$ ) (Heuer et al., 2011; Pollard, 1986). A positive value thus meant a positive change upon interim appointment, and a negative value meant a negative change in points per game.

Points per Game was always compared within the company, thus eliminating between firm differences, and keeping circumstances between pre- and post-interim appointment as equal as possible (aside from the intervention of changing the manager) (Heuer et al., 2011). By creating an average measure of PpG, outliers and environmental effects, such as playing a difficult (or easy) opponent (Liu et al., 2016), injuries among (key players of) the squad (Henderson et al., 2006), and out- or underperforming in a single game (Deutscher & Büschemann, 2016), were evened out.

#### Independent Variables

In order to answer hypothesis 2, 3, 4 and 5, information on Experience in the Field, International Experience, Tenure and Age was gathered.

Experience in the Field in Upper Echelons Theory is measured and analysed as time employed in a similar capacity or with comparable responsibilities, in the same industry (Awa et al., 2011; Carpenter et al., 2004b; Hambrick, 2007; Karake, 1995). In the case of this research, experience in the profession is therefore collected and measured as the years employed in the capacity of Manager (also called Head Coach) of a football club.

International Experience is similarly collected in Upper Echelons Research (Đerđa, 2017; Hutzschenreuter & Horstkotte, 2013; Lin & Liu, 2012), with the differentiation of only regarding experience outside the domesticity of the company. This research has thus gathered

international experience, as years of experience as a manager of football clubs outside the competition of the current interim appointment (any experience outside the Premier League in case of an appointment to a club in the Premier League, and correspondingly for the Bundesliga and La Liga).

Experience in the Field and International Experience are measured as the time a manager has been in management in the same industry, on the other hand, Tenure is seen as firm-specific experience. In Upper Echelons Theory, it is thus measured as time employed by the company, unrelated to specific professional capacity (Abatecola & Cristofaro, 2018; Karake, 1995). Tenure was therefore gathered as any form of experience the interim manager had, prior to their appointment, within the football club, in any capacity; this could be as player, staff-member, (assistant-)manager, etc.

Age was calculated at the moment of appointment. Initially gathered in number of days, and consequently converted to age in years.

### Control Variables

Aside from the dependent and independent variables, the variables 'Competition' and 'Percentage of Season at start of Interim Appointment' were added as a control. Considering the fact that data from 3 different competitions were taken into consideration, the country and league in which an interim is appointed (Premier League, Bundesliga & La Liga) were controlled for. Secondly, the progress of the season at the start of the interim appointment was included as a control variable. As not all seasons have the same length (38 in the Premier League and La Liga versus 34 in the Bundesliga), this variable was converted to the nominal value of the percentage of the season that had passed at the point of appointment.

### Inclusion Criteria

In order to make valid statements and comparisons between interim Performance, this research has chosen to only compare cases in which the number of games under a manager is 6 or higher (at least 15% of a season). In appointments of 5 or less games, any measure for Performance will highly fluctuate due to a single good or bad game (as it is an average); as an appointment lasts longer, potential outliers will be evened out. Furthermore, Performance was only evaluated over the running season (results from previous seasons were neglected), due to the highly fluctuating nature of squads between seasons and thus (expected) results. This has also meant that Interim Management appointments within the first 5 games of the start of the

season were excluded due to a lack of valid reference data. This has led to the inclusion of 136 of the 186 interim appointments in the Premier League (40), Bundesliga (41) and La Liga (55) over the course of 6 seasons, starting in August 2016, and ending in May of 2022.

*Table 1: Number of Observations and Inclusions*

			Premier League		Bundesliga		La Liga	
	Total	Included	Total	Included	Total	Included	Total	Included
Number of Interims	186	136	57	40	55	41	74	55

### Analysis

The data was analysed, and the hypotheses tested in the statistical programme Stata 16.1.

In order to test hypothesis 1, measuring the influence of the appointment of an interim on Performance, a paired sample t-test was done (Xu et al., 2017). As data on Performance was gathered before and after the appointment of an interim within the company, this test was used as a form of a difference-in-difference estimation (Chabé-Ferret, 2010; Ross & Willson, 2017), mitigating biases stemming from selection effects and extraneous factors such as between company differences in Performance, resources, finances, etcetera.

For hypotheses 2 through 5, pertaining the effects of Interim manager characteristics on the (change in) Performance, a linear regression analysis was done (Wooldridge, 2014). In order to prevent biased effects, a Multiple Linear Regression (MLR) was done by successively running models, separately introducing each independent variable to the model (Pannucci & Wilkins, 2010). This was done by initially running a model, regressing the control variables ('Country' & 'Progress of Season at Start of Interim Period') on the dependent variable (Change in Points per Game), and subsequently separately expanding this model with each of the hypothesised interim characteristics (Experience in the Field, International Experience, Tenure and Age). By adding these variables separately to the model, character-specific effects were tested (Uyanık & Güler, 2013). Ultimately, a full model, including all characteristics (as well as the controls), was run to test for significant explanatory variables (Pandis, 2016).

## Results

In order to ensure unbiased parameters and estimators, several analyses were run. Results of a Shapiro-Wilk test for normality, indicate no evidence for a non-normally distributed dependent variable (Change in Points per Game);  $W = .994, p = .871$  (Das & Imon, 2016; Yap & Sim, 2011). All independent variables measuring the different types of experience were non-normally distributed (Experience in the Field ( $W = .912, p < .001$ ), International Experience ( $W = .735, p < .001$ ) and Tenure ( $W = .733, p < .001$ )), and upon examination were all skewed right. This was likely due to the high number of people having only one form of experience, and consequently very low values on the other forms of experience. This issue will be resolved by running extensive robustness tests using alternate and composite measures of experience (Hubert & Van der Veecken, 2008; McElreath, 2020).

The Breusch-Pagan test for heteroscedasticity was run, no evidence for heteroscedasticity was found ( $Chi^2 = 2.14, df = 1, p = .144$ ), indicating homoscedastic data (Studenmund, 2017a).

Table 2: Means, Standard Deviations, and Correlations

Variables	M	SD	Correlations						
			PpG Change	Experience in the Field	International Experience	Tenure	Tenure <sup>2</sup>	Age	
PpG Change	0.34	0.38	1.00						
Experience in the Field	14.23	10.49	0.06	1.00					
International Experience	7.13	9.57	- 0.04	0.63	1.00				
Tenure	1.40	3.09	0.04	- 0.34	- 0.23	1.00			
Tenure <sup>2</sup>	39.50	115.15	- 0.01	- 0.28	- 0.16	0.94	1.00		
Age	51.58	9.74	- 0.01	0.81	0.53	- 0.13	- 0.07	1.00	

In Table 2, the Means, Standard Deviations and correlations of all variables are shown. The correlations showed initial directional effects of the independent variables on the dependent variables. Experience in the field and the variable Tenure appeared to have a positive correlation with Change in Points per Game, while Age and (somewhat unexpectedly) International Experience were found to be negatively correlated with Change in Points per

Game. Tenure<sup>2</sup> was also negatively correlated with Change in Points per Game, hinting at a non-linear relationship between Tenure and Change in Points per Game (in combination with the positive correlation of Tenure with Change in Points per Game).

The correlation between Experience in the Field and International Experience (0.63) and Age (0.81) are the highest and were examined using a Variance Inflation Factor (VIF) analysis (see Table 3). This showed no concern pertaining the Variance Inflation Factors of Experience in the Field and International Experience. High VIF-values for measures Tenure and Tenure<sup>2</sup> were fully expected due to their inherent correlation, and will be unlikely to have adverse consequences (Midi et al., 2010). All other VIF-values were below 5, indicating no evidence of multicollinearity in the sample (Studenmund, 2017b).

*Table 3: VIF-Values*

<b>Variables</b>	<b>VIF</b>
Experience in the Field	4.13
International Experience	1.77
Tenure	8.43
Tenure <sup>2</sup>	8.24
Age	3.24
<b>Controls</b>	
Country	
- Germany	1.48
- Spain	1.60
Progress of Season at Appointment	1.05
<b>Mean VIF</b>	3.74

The combination of the normally distributed dependent variable, homoscedasticity and lack of evidence in favour of multicollinearity ensured unbiasedness of the parameters and variance of the estimators (Wooldridge, 2014). This meant that we could perform a reliable regression analysis (Poole & O’Farrell, 1971).

## Tests

Hypothesis 1 theorized a positive effect of interim appointment on Performance. In order to test Hypothesis 1 a paired t-test was done. Points per Game of the Predecessor was compared to the Points per Game of the Interim manager. There was a significant positive difference between the average Points per Game of the Interim ( $M = 1.21, SD = 0.51$ ) and the Points per Game of the Predecessor ( $M = .87, SD = 0.40$ );  $t(135) = 8.08, p < .001$ . This means that we found significant evidence in favour of hypothesis 1.

As an effect of interim appointment on Performance was found, hypotheses 2 through 5 investigate the characteristics of the interim manager on this effect. In order to eliminate the influence of confounding variables, and increase internal validity (Behi & Nolan, 1996; Halperin et al., 2015), ‘Country of Competition’ and ‘Progress of Season at Appointment of Interim manager’ were controlled for.

In Hypothesis 2, we looked at the effect of experience in the field on change in Performance. This was tested by including the variable ‘Experience in the Field as Manager’ in a regression on Change in Points per Game (Performance). Results were statistically insignificant: ( $R^2 = .023, F(4, 131) = 0.75, p = .557$ ), the variable ‘Experience in the Field’ was also not found to significantly predict Change in Points per Game ( $\beta = .002, p = .656$ ). This meant that there is no evidence in support of hypothesis 2.

Hypothesis 3 stated a positive effect of international experience on the change in Performance. This was tested by incorporating the variable ‘International Experience as a Manager’ in the regression analysis. Results were statistically insignificant: ( $R^2 = .025, F(4, 131) = 0.84, p = .503$ ). On top of not being significant, contrary to the hypothesis, the effect appeared to have an inverted directionality, pointing at a negative effect of international experience on Performance ( $\beta = -.004, p = .466$ ). A lack of significant effects meant that we cannot reject the null hypothesis, and thus found no evidence in favour of hypothesis 3 was found.

Hypothesis 4 postulated an inverted U-shaped relation between the tenure of an interim manager and Performance. In order to test this, ‘Total Tenure at the Company’ was included in the regression analysis, as well as the squared variable called ‘Tenure<sup>2</sup>’. Results were not statistically significant: ( $R^2 = .037, F(5, 130) = 1.00, p = .420$ ). The Betas do hint towards an inverted U-shape in directionality: Tenure:  $\beta = .031, p = .149$ ; Tenure<sup>2</sup>:  $\beta = -.001, p = .210$ , but

fail to significantly predict Performance. This indicates not enough evidence in support of hypothesis 4.

The fifth hypothesis detailed an inverse effect of age on change in Performance; the younger the interim, the better the Performance. Hypothesis 5 was tested by including the variable ‘Age’ in the regression analysis. Results were statistically insignificant ( $R^2 = .021$ ,  $F(4, 131) = 0.71$ ,  $p = .587$ ). In accordance with the hypothesis, the effect of age on Performance appears to be a negative ( $\beta = -.001$ ,  $p = .875$ ), but this variable does not significantly predict Performance. This leads to there being not enough evidence to reject the null, and in favour of an effect of age on Performance.

Table 4: Model; Effects on Change in Points per Game

<b>Variables</b>	Controls Only	Hypothesis 2	Hypothesis 3	Hypothesis 4	Hypothesis 5	Full Model
Experience in the Field		.002 (.005)				.015 (.009)
International Experience			-.004 (.006)			-.008 (.008)
Tenure				.031 (.021)		.032 (.022)
Tenure <sup>2</sup>				-.001 (.001)		-.001 (.001)
Age					-.001 (.005)	-.008 (.009)
<b>Controls</b>						
Competition						
- Premier League	-	-	-	-	-	-
- Bundesliga	.070 (.109)	.077 (.111)	.052 (.112)	.064 (.110)	.068 (.111)	.055 (.112)
- La Liga	-.066 (.102)	-.054 (.106)	-.086 (.106)	-.084 (.105)	-.068 (.104)	-.073 (.109)
Progress of Season at Appointment	-.002 (.002)	-.002 (.002)	-.003 (.002)	-.003 (.002)	-.002 (.002)	-.002 (.002)
<b>Characteristics of Study</b>						
N	136	136	136	136	136	136
R-Squared	.021	.023	.025	.037	.021	.058
Number of Teams	68	68	68	68	68	68

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ ; Standard Errors between brackets

Finally, a Multiple Regression Analysis was run with all hypothesised variables, leading to a full model. This yielded no significant results;  $R^2 = .058$ ,  $F(8, 127) = 0.98$ ,  $p = .454$ . None of the (hypothesised) independent variables were significant in this model: Experience in the Field:  $\beta = .015$ ,  $p = .116$ ; International Experience:  $\beta = -.008$ ,  $p = .280$ ; Tenure:  $\beta = .032$ ,  $p = .147$ ; Tenure<sup>2</sup>:  $\beta = -.001$ ,  $p = .275$ ; and Age:  $\beta = -.008$ ,  $p = .362$ . Providing no further evidence in favour of hypotheses 2, 3, 4 or 5.

### Robustness Tests

In order to validate the results, all variables were gathered in multiple ways. Regressions were run in order to check for robustness of the measures and tested model. Full results can be found in Appendix 2.

### Dependent Variable

A second, more subjective, measure of Performance was also gathered: League Position. League position can take on any whole value between one and twenty. With one being the best, and twenty being the worst (although in the German Bundesliga, eighteen is the worst). League position was also gathered in 3 ways: League Position of Predecessor (which is equal to the League Position at the start of the interim period), League Position of the Interim manager (at the end of the Interim Period or the end of the season), and Change in League Position (the difference between the start and end of the interim period). Due to the more subjective nature of this measure, this variable was used in a robustness test. When compared to the full model, the inclusion of Change in League Position (as opposed to Change in Points per Game) showed no significant effects.

### Independent Variables

Whereas the main variable for Experience in the Field pertained years of experience in as manager/head coach of a football team, other measures for experience in the field were also gathered. As a robustness test the measures experience in the field as a football player, experience in the field as staff-member (including as head coach), total experience in the field (both as player and staff-member) and number of previous interim appointments were gathered and included as an alternative for Experience in the Field. This test yielded no significant results (up to the  $\alpha = .10$  level).



Similarly, International Experience was also gathered using the same measures (as a player, as staff, as total of player and staff, and number of international interim appointments). This bore no significant results.

In the main model, Tenure is measured as total experience within the firm. Tenure was conversely gathered as within company experience as player, as head coach, and as staff. Furthermore, the number of prior interim appointments within the football club was gathered. When including these measures in the model (instead of Total Tenure), no significant effects were measured for any of the alternative measures. As Tenure was hypothesized to have a non-linear effect, the squared variable was added in the model, in order to check for a potential linear effect of Tenure on Performance, it was excluded as a robustness test. This resulted in a significant effect of Experience in the Field (at  $\alpha = .10$ ,  $\beta = .016$ ).

Ultimately, age was squared and added to the model in lieu of checking U-shaped relationships. No significant results were found.

## Discussion

This research has attempted to link the Upper Echelons Theory framework to Interim Management. There appeared to be a solid theoretical ground for expanding UET to Interim Management. The central argument of UET states that the characteristics of executives (i.e. people with direct influence on strategic choices) directly impact Performance (Hambrick, 2007; Hambrick & Mason, 1984). Auxiliary, research into interim managers has called for the inclusion of manager characteristics in Interim Management research into Performance (Woods et al., 2020). Upper Echelons Theory has already expanded its relevance to different roles within companies and considering the direct impact interim managers have on strategy, Interim Management should be considered a logical ground for further development.

In order to test the applicability of UET on Interim Management, two research questions were posed and answered using data from the context of interim manager appointments in football. So as to test the suitability of Upper Echelons Theory on Interim Management, the first research question pertained the impact an appointment of an interim manager has on Performance. In line with hypothesis 1, based on both UET and Interim Management research, the appointment of an interim manager increased the average Points per Game significantly by 0.3409 points (see Appendix 1). The results show a clear significant positive effect of the appointment of an interim manager on Performance. This finding falls in line with the idea that Upper Echelons Theory might be a good fit for Interim Management.

Research Question 2 looked into interim manager's characteristics that impact the change in Points per Game, as caused by the appointment of an interim manager. We defined 4 key aspects from Upper Echelons Theory and compared this with Interim Management research: Experience in the Field, International Experience, Tenure and Age. Research into these characteristics were largely in agreement and resulted in hypotheses concerning positive effects for Experience in the Field and International Experience on Performance, a negative effect for Age on Performance, and an effect of Tenure on Performance in the shape of an inverted-U. We found that none of these characteristics appeared to significantly influence Performance (see Table 4), and International Experience even appeared to have an opposite, negative (though not significant) effect on Performance.

In order to rule out fallacies in the measurement of the hypothesized characteristics, additional robustness tests were done using alternative measures of both the dependent and the independent variables. This however yielded no significant results (see Appendix 2).

Consequently, none of the hypotheses 2, 3, 4 and 5 appear to be sound: there is no effect of Experience in the Field, International Experience, Tenure and Age on Performance.

### Implications

From the results of research questions 1 and 2 jointly, it becomes clear that, although appointing an interim manager has a positive effect on Performance, this is not due to the personal characteristics of the interim manager. These results are at odds with the idea that Upper Echelons Theory is a valid framework for Interim Management.

Although Interim Management research has called for personal characteristics of interim managers to be researched and linked to Performance, this research has failed to find an influence of these characteristics. In Upper Echelons Theory, personal characteristics of executives have an impact on the strategic decisions of the company and consequently their Performance (Hambrick & Mason, 1984). Interim Management research poses that appointing an interim manager will lead to better results (Isidor et al., 2014; Jas, 2013). This research finds evidence in favour of the second part of Upper Echelons Theory; executives make strategic decisions that impact Performance, which is also in line with Interim Management research. We however fail to find evidence in favour of the first part of UET, where it tries to tie personal characteristics to the Performance of these executives (or in our case, of interim managers).

We have identified two main possible explanations for a lack of applicability of Upper Echelons Theory on interim management. Firstly, the nature of interim managers is that they come into a company in times of stress and bad Performance (Goss & Bridson, 1998), this is a different type of job than being a (regular) executive in a company. Whereas top executives in UET are given time to adjust and adapt to the company, and set goals for the future (Carpenter et al., 2004b), the nature of Interim Management is that it is short-term and immediate (Reijniers, 2007). Interim managers are appointed to steady the ship (Travis Maynard et al., 2017), and bridge a period until a new, permanent, manager can be appointed (Bach, 2015). They have to make do with the limited resources they have at their disposal; making the best of the available means and time they have. The diversity of strategic choices may therefore be limited, regardless of the characteristics of the interim manager. The strategic choices, inherent to personal characteristics in Upper Echelons Theory might therefore be out of reach for, and less applicable to Interim Management.

Secondly, the characteristics detailed in Upper Echelons Theory may not be relevant for interim managers. In UET Experience (i.e. Experience in the Field, International Experience and Tenure), as well as age are considered to improve know-how (Zhang, 2008) and problem-recognition and solving capabilities (Combe & Carrington, 2015), based on the use of templates (Wang et al., 2016), cognitive schemata (Hedlund et al., 2003), and tried and trusted methods. Interim managers are often appointed when the conventional templates do not fit the unique (or rare) situation the company is in (Bruns & Kabst, 2005; Goss & Bridson, 1998; Vousden, 2002). This calls for innovation (Kleinknecht et al., 2006), ingenuity, and high adaptive behaviour (Bruns & Kabst, 2005). This might result in a lack of transferability of experience and knowledge to the interim job, causing these characteristics to not be applicable in Interim Management.

### Limitations

#### Boundaries of Upper Echelons Theory

In our view, the lack of applicability of Upper Echelons Theory on Interim Management might be due to the differences in the way Performance is measured. Upper Echelons Theory views Performance in an absolute way (Hambrick & Mason, 1984), and relies on comparisons of Performance between companies, and between the executives of these companies (and their characteristics). Interim managers on the other hand, are specifically brought in to improve Performance with respect to their predecessor, and consequently, research into Performance focusses more on the change in Performance (or relative Performance); the Performance of the interim managers, as it relates to their predecessor, within the company.

Although broadly supported, usage of absolute Performance as the dependent variable makes it more susceptible to biases in appointments. Considering the idea that older, more experienced, executives are more expensive, large companies that are already performing well are more likely to opt for them, as they are less likely to make large overhauls to a company (Serfling, 2014), and more likely to keep profits level (thus maintaining the higher level of Performance) (Prendergast & Stole, 1996). On the other hand, companies that are underperforming or doing bad, likely have limited resources and are therefore referred to a pool of younger, less experienced executives.

In this research, this second measure of Performance (relative Performance) was used, in order to eliminate external factors and make fair comparisons between interim managers, diminishing the effect of the circumstances at the moment of appointment. We believe this to

be a much fairer measure, eliminating biases stemming from the appointment itself, and comparing the results based on the merit of the interim manager, instead of on the merit of the company. As stated, we found no significant characteristics using this relative Performance measure.

#### Caveats & Future Research

Unfortunately, this research has a couple of caveats. One of the limitations to this research might be the fact that only information pertaining the characteristics of the interim managers was gathered, and no information on the predecessor was collected. As stated above, one of the merits of this study is the fact that it looks at the change in Performance within company. Research might benefit from also looking at the change in managerial characteristics with regards to Performance. This may offer insights into how interim manager characteristics, as related to predecessor characteristics, influence Performance, and might offer an avenue for UET to become relevant in Interim Management.

Secondly, we have only looked at brief periods (with a maximum of about 9 months, only considering the running season) of interim appointments due to the definition of interim manager appointment in this research (where there is a cut off after the running season, at which point they become a permanent replacement). This created an upper bound of the duration of an appointments and has also limited any observations of long-term effects of interim manager appointments. In UET, a lot of benefits stem from the idea that executives can make long term strategic choices, an interim management period might be too brief for these effects to manifest. Future research should look at longer interim periods and should try to look at the period after the interim manager has left and see whether decisions made by the interim have an impact post-facto.

Finally, there are some methodological limitations. Firstly, due to the limited amount of time, this research has only looked at the three major European football competitions over a period of 6 seasons. A more expansive study might offer more unequivocal evidence against the usage of UET on Interim Management. Secondly, due to the chosen context (football), there are some inherent limitations to this study. Although interim managers are often appointed in this industry, these interim managers are all men, between 29 and 78 years old. This causes there to be some intrinsic limits to the boundaries of this study; for example, there is no (female) interim manager, aged 29 (or under) with 20 years of experience, and similarly, no interim manager aged 78 (or older) with zero years of experience (they would not get

employed). Future research would do well to look into a different industry, where the limits of interim managers are less apparent.

### Conclusion

This research has tried to apply Upper Echelons Theory to Interim Management. Although this is a new application of the Upper Echelons Theory, research into Interim Management pointed in the direction of Upper Echelons Theory, and suggested incorporating interim manager characteristics as the next frontier, urging future research to fill the gap “[...] *in research about the individual characteristics of effective interim leadership*” (Woods et al., 2020, p. 3).

The applicability of UET on Interim Management was tested by, firstly, analysing the influence of the appointment of an interim manager on Performance. Secondly, the influence of interim manager specific characteristics on Performance were examined. While there is considerable proof that appointing an interim manager positively affects Performance, this effect cannot be explained by means of the characteristics of the interim manager. Despite the commonalities between research on both UET and Interim Management, the results of this study appear to refute the application of UET on Interim Management. Considering the fact that a company appointing an interim manager is already underperforming, it might be less relevant who the new (interim) manager is, and more important that a change is made, whatever that change might be.

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Appendices

Appendix 1:

Table 5: Paired Samples t-test

<b>Paired Samples t-test</b>				
	<i>Mean</i>	<i>N</i>	<i>Std. Deviation</i>	<i>Std. Error Mean</i>
PpG Predecessor	.8666	136	.4017	.0344
PpG Interim	1.2075	136	.5122	.0439

<b>Paired Samples t-test</b>								
	Paired Difference					<i>t</i>	<i>df</i>	Sig. (1-tailed)
	<i>Mean</i>	<i>Std. Deviation</i>	<i>Std. Error Mean</i>	95% Confidence Interval of the Difference				
				Lower	Upper			
Difference PpG Interim – PpG Predecessor	.3409	.4919	.0421	.2575	.4243	8.0815	135	0.000

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Appendix 2

Table 6: Robustness Tests - Part 1

<b>Variables</b>	Full Model	No Exclusion	Performance = Change in Position	Exp. in Field as Player	Exp. in Field as Staff	Exp. in Field as Total	Exp. in Field as Interim	Int. Exp. as Player	Int. Exp. as Staff	Int. Exp. as Total	Int. Exp. as Interim
Experience in the Field	.015 (.009)	.016 (.010)	.057 (.054)	.001 (.008)	.003 (.009)	.004 (.010)	-.030 (.030)	.011 (.009)	.014 (.009)	.013 (.009)	.011 (.009)
International Experience	-.008 (.008)	-.004 (.009)	-.026 (.044)	-.004 (.007)	-.005 (.008)	-.005 (.007)	-.005 (.007)	-.009 (.007)	-.010 (.007)	-.006 (.004)	-.016 (.041)
Tenure	.032 (.022)	.020 (.019)	.208 (.126)	.029 (.022)	.030 (.022)	.029 (.022)	.024 (.023)	.032 (.022)	.030 (.022)	.031 (.022)	.033 (.022)
Tenure <sup>2</sup>	-.001 (.001)	-.001 (.001)	-.004 (.006)	-.001 (.001)	-.001 (.001)	-.001 (.001)	-.001 (.001)	-.001 (.001)	-.001 (.001)	-.001 (.001)	-.001 (.001)
Age	-.008 (.009)	-.011 (.009)	-.063 (.052)	-.002 (.006)	-.000 (.009)	-.001 (.011)	.007 (.007)	-.008 (.009)	-.007 (.009)	-.007 (.009)	-.008 (.009)
<b>Controls</b>											
Competition											
- Premier League	-	-	-	-	-	-	-	-	-	-	-
- Bundesliga	.055 (.112)	.073 (.122)	-.534 (.645)	.058 (.116)	.050 (.114)	.062 (.114)	.061 (.113)	.055 (.111)	.052 (.111)	.047 (.111)	.070 (.112)
- La Liga	-.073 (.109)	.015 (.115)	-.767 (.626)	-.093 (.111)	-.097 (.109)	-.087 (.111)	-.081 (.109)	-.080 (.109)	-.074 (.108)	-.084 (.108)	-.054 (.108)
Percentage of season at start of Interim Term	-.002 (.002)	-.003 (.002)	-.030** (.012)	-.003 (.002)	-.003 (.002)	-.003 (.002)	-.003 (.002)	-.002 (.002)	-.003 (.002)	-.003 (.002)	-.002 (.002)
<b>Characteristics of Study</b>											
N	136	186	136	136	136	136	136	136	136	136	136
R-Squared	.058	.031	.102	.040	.040	.041	.047	.063	.065	.069	.056
Number of Teams	68	69	68	68	68	68	68	68	68	68	68

\* p < .1, \*\* p < .05, \*\*\* p < .01; Standard Errors between brackets

Table 7: Robustness Tests - Part 2

<b>Variables</b>	Full Model	Tenure as Player	Tenure as Staff	Tenure as Head Coach	Tenure as Interim	Exclusion of Tenure <sup>2</sup>	Inclusion of Age <sup>2</sup>
Experience in the Field	.015 (.009)	.014 (.009)	.013 (.009)	.012 (.009)	.012 (.009)	.016* (.009)	.015 (.010)
International Experience	-.008 (.008)	-.010 (.008)	-.008 (.008)	-.007 (.008)	-.010 (.008)	-.009 (.008)	-.008 (.008)
Tenure	.032 (.022)	.012 (.036)	.060* (.035)	.012 (.079)	-.063 (.163)	.010 (.008)	.032 (.023)
Tenure <sup>2</sup>	-.001 (.001)	.000 (.003)	-.004 (.003)	.007 (.011)	.010 (.041)	-	-.001 (.001)
Age	-.008 (.009)	-.008 (.009)	-.008 (.009)	-.010 (.009)	-.006 (.009)	-.009 (.009)	-.006 (.049)
Age <sup>2</sup>							-.000 (.000)
<b>Controls</b>							
Competition							
- Premier League	-	-	-	-	-	-	-
- Bundesliga	.055 (.112)	.055 (.112)	.036 (.112)	.037 (.113)	.058 (.113)	.051 (.112)	.055 (.112)
- La Liga	-.073 (.109)	-.067 (.109)	-.086 (.109)	-.059 (.110)	-.052 (.110)	-.075 (.109)	-.074 (.110)
Percentage of season at start of Interim Term	-.002 (.002)	-.003 (.002)	-.002 (.002)	-.003 (.002)	-.002 (.002)	-.003 (.002)	-.002 (.002)
<b>Characteristics of Study</b>							
N	136	136	136	136	136	136	136
R-Squared	.058	.046	.062	.068	.041	.049	.058
Number of Teams	68	68	68	68	68	68	68

\* p < .1, \*\* p < .05, \*\*\* p < .01; Standard Errors between brackets