INFORMING DECISIONS TO INFLUENCE CHANGE:

THE CHANGING ROLE OF THE IN-HOUSE PRACTITIONER IN

THE MINISTRY OF DEFENCE

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Abstract

This Professional Doctorate in Occupational Psychology presents four pieces of research, alongside an explanatory prologue and epilogue, which were conducted to show aspects of the changing role of in-house psychology practitioners. The first two research chapters introduce an in-house psychology team and the organisational changes they experienced and the impetus for developing their output. The second two chapters present examples of such output. The Organisational Case Study describes the analysis of an organisational change process and the associated emotional responses demonstrating how radical change can be positively handled. The Intervention Programme presents the implementation of a homeworking solution to tackle staff retention, and proposes that a hybrid model will increase the likelihood of successful remote working implementation. The Critical Literature Review presents an evaluation of environmental scanning and its relationship with occupational psychology; arguing that environmental scanning is a vital higher order skill for psychology practitioners to understand external contexts. Finally, the Empirical Project presents the investigation of social processes of recruitment, supporting previous research that applicant perceptions should be considered and that this approach is as valid as more traditional models of recruitment research. These research topics were chosen to show the diversity of in-house practice and provided an opportunity for exploration of new concepts and the development of inductive reasoning. My original contribution is to both knowledge and practice, by testing and supporting theoretical premises, such as the importance of emotions during radical change, in new contexts; and also providing applied advice and guidance based on this research.

CONTENTS

Table of Contents: Figures

Table of Contents: Tables

Table of Contents: Appendices

Chapter 1: Prologue

Occupational psychologists apply their knowledge of human behaviour to the

workplace environment in order to improve the effectiveness, efficiency and wellbeing

of individuals in organisational settings (BPS, OP - FIRST, 2006). I work for the

Ministry of Defence (MOD) in a small in-house occupational psychology team (OPT)

whose role is to conduct bespoke research and although it is based on these principles,

the resultant evidence has not always been utilised by clients. However, the work of

this psychology team has become more closely scrutinised with a growing interest in

and a requirement to demonstrate that organisational decisions are based on evidence

not managerial opinion (Rousseau, 2006). This professional doctorate charts my

particular efforts to assist my team to articulate their evidence based practice through

both the refinement of our role as in-house practitioners and the research efforts

undertaken to improve the delivery of our services. This prologue describes my

motivation for embarking on the professional doctorate in occupational psychology, the

reasons for choosing my particular research approach, and the overarching theme which

underpins this research.

Motivation to Undertake the Professional Doctorate

I have outlined below the reasons why I decided to commence the professional

doctorate. These reasons in part explain why I chose my particular research approach

and also set the tone for the doctoral journey I have undertaken.

Professional development. I initially undertook the doctorate as a professional

development opportunity. One fundamental tenet of practising occupational

psychologists is the maintenance and development of competence to practise and to

"adapt their skills and expertise flexibly according to changes in the working context"

(BPS, 2006, p. 3). This development need has been reinforced by the statutory

registration of practitioner psychologists by the Health Professions Council (HPC), and

the associated Standards of Proficiency, continuous professional development (CPD)

stipulations, and maintenance of registration. Furthermore, I have CPD requirements

for Chartered Scientist status. This programme provided an opportunity to develop my

competence and skills set using the National Occupational Standards (NOS) for

Psychology as the framework, and at the same time broaden my outlook and provide an

intellectual challenge. I was keen to develop across all 6 NOS Roles (especially as

Roles 5 and 6 are not included in training for chartered status). A list of key areas for

development is provided at Appendix A. To broaden my knowledge, I chose topics

from areas in organisational psychology which receive less or limited theoretical and

research attention such as emotions during radical change, homeworking, environmental

scanning and social processes in recruitment. I hope that the investigation of these

topics will help my professional development but also contribute new knowledge and

learning in these areas.

Academic rigour. I also undertook the doctorate as an opportunity to bring

additional academic rigour and structure to my work (and that of OPT). Professional

practice can so often be focused on meeting the needs of the client and the balance

between the application of psychology and the academic rigours of research can be

difficult to maintain (e.g. Hodgkinson, Herriot and Anderson, 2001; Anderson, 2004).

The doctorate provided the opportunity to develop my work practice by grounding it in

the principles of good science, and as such delivering an improved service to clients.

Applied research. I decided to undertake a practitioner doctorate as my work

role would not easily facilitate PhD research. This doctorate provided the prospect of

accreditation and use of my own work practice within the framework of a practitioner

doctorate. I wanted a programme that was related to my ongoing work rather than to

generate a piece of research to fulfil PhD demands. In doing so this might help bridge

the academic-practitioner divide (Cascio and Aguinis, 2008) that can be apparent in

applied settings; for instance, the Empirical Project component allowed me to utilise

new theories in recruitment research (Lievens and Highhouse, 2003) and alternative

techniques for data collection (Gutman, 1997).

Exploration. The programme provides a further opportunity to explore more

closely and better understand organisational processes in a bottom up and inductive

manner; collating data and making observations, labelling and categorising this data,

and finally determining the relationships and associations between these categories

(Eisenhardt and Graebner, 2007). This inductive approach can be used to develop

models of organisational concepts which have implications for real world practice

(Hambrick, 1994). This exploration intends to use the essence of grounded theory

(Glaser and Strauss, 1967) to guide the explorations but will not strictly follow the

technique. For instance, it is expected that the models which are developed will also

incorporate previous research and be formulated solely from the emergent data allowing

for wider "analytic generalization" (Yin, 1989, p. 10).

Overarching Theme

My doctoral thesis has four distinct components in addition to this prologue and

a concluding epilogue. Instead of exploring one area of psychology such as job

satisfaction or turnover, and connecting the four research elements to this topic, I have

chosen a more eclectic approach. Here each component investigates a separate topic

albeit it that these research components have an overarching theme: *Informing decisions

to influence change: the changing role of an in-house practitioner.* This theme relates

to my research and work interest in evidence based practice and how to deliver this to

best effect in my everyday work. In this way my work practice guides my research

efforts, and the doctorate in turn improves my work practice. My thesis naturally draws

heavily on my work practice and on how this practice relates to not only my own project

work but that of OPT. This reflection is deliberate, as effective teamwork and

performance underpin the success of OPT.

Evidence based management is currently in vogue but it is not a new

occupational practice (Rousseau, 2006). Indeed evidence based practice is very much

within the bailiwick of occupational psychology ensuring evidence from high quality

research can be applied in accordance with stakeholder needs. This model, however, is

not always adhered to for a variety of reasons such as management preferences, time

constraints, lack of evidence or difficulty translating this evidence (Rousseau, 2006).

Consequently, having in-house psychologists such as OPT will not guarantee that

evidence based practice is followed or the conditions are appropriate for its

implementation. OPT's vision is to ensure that the research evidence which is collated

should and does support organisational decision making in order to make a difference,

that is, *informing decisions to influence change,* whilst maintaining theoretical and

methodological rigour. The strap line *informing decisions to influence change* has

captured the attention of stakeholders, themselves cognisant of the trend towards

evidence based policy (e.g. Cabinet Office, 1999). It is worth noting here that evidence

can have different meanings, and for OPT evidence means research based, whereas

many stakeholders are content that evidence constitutes any information including

expert opinion (Major, 2000). To achieve successful delivery of evidence based

practice which is both relevant and useful to stakeholders, and grounded in

psychological principles, it is vital that the role of OPT as in-house practitioners delivers

an appropriate and optimal service.

New ways of working. Individuals often have to adopt new ways of working including changing work roles. As I began this doctorate organisational change was requiring my team to adapt our approach and adopt new ways of working; and, as the Case Study will show, even unexpected, radical change can facilitate adaptation. Of course, occupational psychologists regularly develop and update their skills and knowledge through CPD and this may lead to improvements in their workstyle. This doctorate is expected to facilitate the development of new ways of working through my application of different research methods, for example, case study methodology; and provide the 'space' to explore issues in greater depth, for example, social processes in recruitment, which can be difficult given the day to day constraints of delivering an output.

Individual Components

The four individual components of the doctorate are outlined below. I have treated them as separate chapters each telling distinct but connected stories. The chapters are presented in a deliberate order, firstly to introduce OPT and the radical change we experienced (the Case Study) followed by the Intervention Programme which involved further change for OPT and a challenge to delivering evidence based practice. The fourth chapter is the Critical Literature Review regarding information seeking through environmental/external scanning, the implementation of which has greatly improved OPT's ability to deliver relevant and useful evidence. Finally, Chapter 5 details the largest research activity of the doctorate, that is, the Empirical Project regarding social processes of recruitment, namely, applicant perceptions.

Chapter 2 - an organisational case study. In the Case Study I describe and analyse an organisational change process which took place over a four year period involving OPT. The Case Study aimed to offer an analysis of what was revealed during

the organisational change process from the perspective of individuals with a theoretical

knowledge of organisational change. This study allowed me to utilise a case study

method to conduct a more intimate and detailed investigation within a real life context

(Yin, 1994) than is normally possible during organisational studies; as well as the

opportunity for professional introspection so vital for transformation (Anderson, 2004).

I hope that the study provides a further contribution to understanding employee

reactions and responses (Frijda, 1988) to radical organisational change (Huy, 2002; and

Duncan, Mouly and Nilakant, 2001). Finally, I hope that the Case Study will be a

contribution to organisational change practice by identifying lessons learned and

guidelines for implementing successful organisational change.

Chapter 3 - an intervention programme. In the Intervention Programme I

present the implementation of teleworking practices, specifically related to

homeworking, from the construction of a business case through to evaluation. This

programme will contribute to understanding of real world homeworking and

teleworking practice (Harpaz, 2002) and the conditions necessary for introduction of

such working arrangements (Baruch and Nicolson, 1997). Furthermore it will

contribute a model for implementing the practice of this alternative method of working

(Halford, 2005; Katz, 1987).

Chapter 4 - a critical literature review. In the Critical Literature Review I

present evidence that the business process of environmental scanning (Aguilar, 1967),

which is often an antecedent of strategic decision making, is in essence an information

seeking activity (Rouse and Rouse, 1984); and as such is influenced by a number of

psychological processes. By developing the theory that environmental scanning is a

form of human information seeking (Correia and Wilson, 2001) I hope to provide a

better understanding of the process of environmental scanning. In this way the

knowledge will contribute to organisational functioning by providing understanding of

the practice and pitfalls in its application and influence on organisational decision

making (Daft and Weick, 1984). Furthermore, I will show in the literature review how

occupational psychology can contribute to the success of environmental scanning (e.g.

Auster and Choo, 1994; Miliken, 1987); and how occupational psychology research

could benefit from the products of environmental scanning by developing

environmental scanning as a higher order skill set for occupational psychology

practitioners.

Chapter 5 - an empirical project. In the Empirical Project I present the most

detailed study to date on why Royal Air Force (RAF) applicants choose to apply to join

the RAF. I conducted the project to better understand the influence that social processes

including familiarity with the organisation (Wanous, 1989); organisational image

(Lievens and Highhouse, 2003); and job characteristics (Posner, 1981; and Powell,

1984) might have on recruitment outcomes. This research included the application of

an under-utilised theory of organisational image by Lievens and Highhouse (2003). The

investigation also demonstrated the development of an alternative research method,

namely, laddering interview technique (Reynolds and Gutman, 1998) based on means-

end chain hierarchical theory (Gutman, 1997) to understand underpinning motivations

and values of applicants. Furthermore, I aimed to create a new (baseline) database on

why applicants apply which can be monitored over time. The social process of

recruitment is important to an organisation such as the RAF because whilst they want to

select the most appropriate candidate in terms of competence and potential, it is also

vital to recognise and understand applicants' perceptions and attitudes as these are

influential in shaping future job expectations. Specifically, for an organisation such as

the RAF, a particular return of service/tenure is expected (especially given recruitment

and training outlay) and therefore a poor organisation-person fit will ultimately increase early attrition and reduce retention rates. Finally, this study will directly contribute to recruitment policy in focusing finite resources to areas of concern.

Summary

These four research components were all conducted with the premise of *informing decisions to influence change*. They do this in different ways and for different stakeholders. Each component is connected to the premise of evidence based practice and OPT's need to develop their work approach in order to deliver. Ultimately, the aim of this doctorate has been to improve my capabilities as an occupational psychology practitioner so that I deliver an optimal service to my clients. These abilities include generally a continuous improvement of my role as an occupational psychologist (NOS Key Roles 1-4); and specifically, utilising new research methods, contributing to the advancement of psychological theories, and improving my and my team's ability to provide information to support decision making (NOS Unit 6.12). In doing so I aim to contribute new knowledge, the acquisition of new skills and the development of new ways of working, not just for myself but significantly for my team and the clients we serve.

Chapter 2: Understanding the Effect of Radical Organisational Change on a Small

Team of In-House Practitioners - An Organisational Case Study

Introduction

Organisational change is an inevitable aspect of organisational functioning and

given the volume of research on the subject, as well as the number of different

transformational processes that occur, it has become conventional wisdom that change

is actually a constant (Worrall, Cooper and Campbell-Jamison, 2000). Organisational

change is planned and implemented under the auspices of improvement, organisational

development and benefits such as organisational performance and individuals'

behaviours (Weick and Quinn, 1999). Much of the research on organisational change is

related to incremental, planned change but what occurs during a radical change process?

Significantly, how do the employees involved react and respond to radical change

especially if it is unexpected? Is radical change the impetus for further change and does

it shape all subsequent change?

In this chapter I present a four year long case study which describes and

analyses the effects of a radical organisational change event and involved a small public

sector occupational psychology team[1] (OPT) working as in-house practitioners. Special

attention was given to the emotional responses of OPT during and after the trigger

event, as well as the outcomes of this change. My objective for this research was to

provide a better understanding of the reactions to and effects of radical change and in

doing so offer an analysis and interpretation of what is revealed during such a process

from the perspective of individuals with a theoretical knowledge of organisational

change. I was able to achieve this through my position as a member of OPT who,

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[1] The term 'occupational psychologist' is not used as some members of the team are in training.

whilst experiencing my own reactions, was simultaneously objectively recording these processes through the collection of documentary evidence, a structured diary and observation.

In this chapter I present the theoretical framework for the case study before describing the methodology used. I present the results thematically focusing on both the process and outcomes of the organisational change; including whether a rival explanation might have accounted for the outcomes instead. Further, I make observations about OPT with regard to our perspectives of organisational change, and whether any generalisations for dealing with future radical organisational change are possible. Consequently my contribution to occupational psychology knowledge and practice is made through the better understanding of radical change, and I challenge assumptions about the possible negative effects of such a change process. Finally, I present reflections and lessons learned.

Theoretical Frameworks

Organisational change is a vast topic in organisational psychology encompassing many different theoretical perspectives and models (Palmer and Dunford, 2008). Within this variety and "sprawl" (Weick and Quinn, 1999, p. 364) are a range of interrelated theoretical models which serve to explain how organisational change occurs, as well as some of the difficulties encountered when undergoing such experiences. An area of organisational change which is less well researched (McAdam, 2003) is radical change. Radical change has been described as "a qualitative alteration of an organization's rules of organizing - the fundamental rules that members use to interact cognitively and behaviorally with the world around them" (Huy, 2002, p. 31).

Radical change does not necessarily refer to the speed of change but rather a change to current ways of operating or things that are taken for granted (Alvesson and

Willmot, 2002). The case study in question was partly chosen because the nature of the organisational change experienced was radical and unexpected. The characteristics of radical change mean it will no doubt cause emotional reactions (Huy, 2002); indeed more incremental forms of organisational change can provoke a multitude of emotional reactions in response to various events (Frijda, 1988), often culminating in resistance to change (Nadler, 1987), and so play a major role in how change is perceived and dealt with (Bartunek, 1984). The theoretical frameworks of radical change and reactions to change will be discussed in greater detail as the case study unfolds to provide possible explanations for the behaviour and emotional responses observed.

Rationale

The rationale for conducting this case study came from my professional interest in understanding organisational change at a micro-level, that is, how it might affect a small team, and how they might react and respond to this change. It was therefore of professional not just organisational interest, and indeed my decision to study the team was not something I had initially considered as a component of my professional doctorate. However, once the trigger event had occurred, it seemed highly probably that significant further change was likely; and this was an opportunity to study reactions and responses to organisational change in an in-depth manner as they unfolded rather than pre-judging likely responses. I was also intrigued as to whether psychologists as individuals who have studied organisational change might react differently to such events. As I began the case study I also saw the opportunity to conduct professional introspection, that is, an element of team reflection and evaluation related to our services and output.

Method

The methodology of the case study took into consideration the important issues

of exploration and introspection and how these related to the research questions.

Exploration. The case study approach is an exploratory investigation which allows the observation of complex and interrelated behaviour within a real life context (Yin, 1994); as well as a better understanding of such phenomena (Langley and Royer, 2006). It is not intended to generalise or suggest replication of the findings but encourages the observation of subtle interactions and responses and "understanding the dynamics present within single settings" (Eisenhardt, 1989, p. 534).

There are criticisms of the case study approach; Yin (1994) describes a range of issues but particularly highlights validity problems, for instance, subjectivity and bias can affect the validity of the data collection, analysis and generalisability. However, whilst acknowledging these shortcomings, the case study method offers a more 'intimate' and revealing approach to investigating organisational issues. The case study allows for 'story telling' where both participants and researchers have an account to tell (Stake, 2000); and even allows for the researcher to recall and reflect on their own experiences whilst conducting their fieldwork (Langley and Royer, 2006). As a member of OPT I was ideally placed to track the organisational change, and provide an insider perspective similar to Duncan et al.'s (2001) case study with the New Zealand Police Service. Having this insider perspective allowed the exploration to include reactions to and responses of organisational change, and their bearing on outcomes.

Professional introspection. One aspect of the case study which added a unique dimension was the professional background of me and my colleagues in the team. As practitioners of occupational psychology, we are knowledgeable about organisational change theory and practice. I was curious as to whether this knowledge would influence how we coped with organisational change and perhaps make us deal with it differently? What happens when psychologists, themselves, are subjected to potentially

negative organisational practices? Additionally, would the lessons identified from OPT

be too specific, because of this understanding, to be applied to other radical change

situations? Furthermore, I was interested in reflecting on whether the organisational

change improved delivery and output at a team level (Cheetham, 1987) because the

change caused us to evaluate what we do.

Research Questions

The case study investigated the change process that OPT experienced over a

four year period. The initial radical change event (trigger) marked the start of the case

study and prompted the following questions which were used to bound and guide the

subsequent data collection.

1. What organisational changes took place?

2. What were the driving/trigger events?

3. How did OPT react to these events?

4. What specific changes occurred within OPT?

5. How successful was the change process?

6. Which lessons learned can be generalised or applied to other change contexts?

7. Did being a psychologist have a mediating effect on the reaction to change?

The first four questions were used to guide the data collection, for instance, a

record of the organisational changes that took place such as department reorganisation

or office moves (Q1). The trigger events such as staff changes (Q2) provided a

contextual framework to link and compare reactions against (Q3). Specific change

events within the team were recorded (Q4), in additional to organisational events, to

include issues such as changes in work prioritisation. The next question was used to

provide evaluative information as I wanted to gather information regarding the

effectiveness of the change process (Q5) to assist my ideas on professional

introspection. The final two questions related to the understanding the possible

generalisation of the findings, as I felt that even though this was a case study, I should

determine if any lessons could be identified and applied to other organisational change

settings (Q6); however, I was mindful that the fact that the team were psychologists

might limited this generalisability (Q7).

Data collection. Yin (1994) describes six data collection methods for use when

conducting case studies: documentation, archival records, interviews, direct

observations, participant-observation and physical artefacts. Each has pros and cons,

and as such a multi-method approach is appropriate and improves the likely content

validity by providing triangulation and cross-referencing (Woodside and Wilson, 2003).

For this study I specifically employed four data collection approaches: documentation/

records, qualitative questionnaires, direct and participant-observation (Table 1). These

collection methods were chosen to improve data validity and reflected the range of

information sources available. More information on the reasoning for each data

collection source is listed in Table 1. Particular emphasis is given to the last data

collection method of participant-observation; which employed a structured diary as a

recording tactic (Schatzman and Strauss, 1973). This provided me with the opportunity

for the observation and recording of emotional responses from an insider perspective

(Duncan et al., 2001); that is, I was able to witness and record the everyday reactions

and behaviours of all team members including myself as I was privy to the interactions

firsthand. Although I recorded my observations of team members' responses in a

structured diary, I did not extend this method to other team members. There were

several reasons for this. My initial diary records where retrospective as although the

case study began with the radical change event I had not decided at that point to

investigate this as a case. As a result initial diaries would not have been

contemporaneous (e.g. Oppenheim, 1966). The main reasons however, were because, despite wanting to collect important research data, I felt ethically I could not impose on my colleagues by asking them to record their feelings (even if this might be cathartic e.g. Webb, 2009). It was clear that the trigger event was a shock and indeed I did not want to impose additional tasks on colleagues during upheaval and an already heavy workload. I tackled this issue by recording my observations and then checking my understanding with colleagues retrospectively. Consequently I removed the onus from them, to be active participants, onto me as a researcher.

Participants. Like the research of Duncan et al. (2001), this case study had a small sample size because it involved a discrete group of individuals (the team members). This is ideal for a case study approach and was therefore a methodological benefit not a weakness.

Table 1

Different Research Methods Employed in the Case Study

Methods	Specifics	Process to be captured	Rationale
Documentation / records	Portfolio created of key documents including emails, memos, meeting minutes, announcements, work plans, office plans.	Capture key events and milestones including dates, issues, sender & recipients; communication and correspondence (with responses to this communication).	Provide context & historical situation. Understand key communication and communicators/recipients. Simple to store. Straightforward to interpret.
Qualitative questionnaires	2 surveys conducted in 2005 & 2007 with internal stakeholders and OPT.	Stakeholder and team feedback and reflection.	Understand different perspectives on the performance and purpose of the psych team. Determine effect of change on the team and their output.
Direct observation	Structured diary to record triggers, events, actions, key players, outcomes.	Events and outcomes such as output, turnover, performance, change in nature or delivery services.	Understand day to day circumstances and events.
Participant-observation	Field notes (contemporaneous & retrospective) of observations added to structured diary.	Emotional responses; day to day functioning.	Understanding of reactions to circumstances. Opportunity to engage with team first hand; capture data not normally privy to.

Data collation and organisation. Consequently the data was collated and organised into four distinct products: a portfolio of key documents (collation of documentation and records); a structured diary (record of my direct and participant observations); qualitative database (two stakeholder surveys); and context map (summary of key dates, events, players, actions and issues mapped onto diary observations). An example of each of these products is presented at Appendix B.

Research issues. Being a member of OPT and simultaneously studying it raised two main concerns: bias and anonymity. Firstly, the issue of bias was addressed by adopting a multi-method approach as described above, and by validating data with other team members through formal reviews (such as the qualitative questionnaires, and also several team building events) and informal discussions in order to provide a reality check (Lincoln and Guba, 1985). The second issue of anonymity compromise was dealt with by not attributing particular responses, reactions or comments to single individuals (Yin, 1994) and ensuring that references remained at the 'team level'. Of course it is possible to ascertain who were team members during the case study, and therefore when presenting examples of my data records it was vital that these were redacted to protect identities.

Analytic Strategy

An analytic strategy was employed to process the data and this is described in Table 2.

Table 2

Analytic Strategy Employed in the Case Study

Approach	Description
Manipulate data	Organise information by categorising events and outcomes, tabulating dates and frequency of events, and creating a spreadsheet context map to record these categories. This was important when recording the trigger event, critical incidents and other key events.
Understand reactions	Connect the team reactions and responses to the context map.
Theoretical propositions	Consider the theoretical frameworks that might explain the process, reactions and outcomes.
Key themes	Consider the main themes that emerge and any threads which run through these.
Professional introspection	Consider if having a good understanding of organisational change influenced how OPT dealt with the changes they experienced. What team analysis occurred?
Rival explanation	Consider the rival explanation that the outcomes were not a result of the trigger event but would have occurred anyway.

Data analysis approach. The data were analysed in the following manner

(Miles and Huberman, 1994):

1. *Indexing data* - The data were initially indexed and ordered chronologically

(facilitated by the documentation and structured diary) into a context map. This linked

dates to triggers, events and individuals, as well as the resultant outcomes and reactions.

This provided the contextual overview but it was clear at this stage presenting the data

this way would be too descriptive and fail to provide an insight (Langley and Royer,

2006).

2. *Coding* – The various data sources were then coded individually according to

comments as they emerged. Attention was paid to identifying key events and their

connection to outcomes as not to assume inappropriate causal links. Also individual

and team responses (both emotional and behavioural) were observed. These codes were

collated so that a within-case comparison could be conducted (Miles and Huberman,

1994).

3. *Categorisation* – Clusters of associated comment codes were categorised into themes by determining similarities and commonalities between codes. Fifteen themes were identified, and these themes were then further refined into overarching categories: process and outcomes.

4. *Abstraction/generalisation* – Consideration was given to how the themes were related to one another and if themes could be generalised to different contexts.

5. *Comparison and interpretation* – The themes were rechecked against the coded data to determine any possible missing information or omissions. The themes were also presented to OPT members for verification and a reality check (Lincoln and Guba, 1985). Finally, themes were compared with extant academic literature, as described by Eisenhardt (1989) as "enfolding literature" (p. 544) to determine similarities or conflict; and thereby attempting to build internal validity.

With regard to presenting the case study there was an additional concern of objectivity. Consequently, when discussing the case study in detail I refer to the psychology team in the third person (and although clearly I am a member, I do not explicitly state this) as not to over or under emphasis my involvement.

The Case: The Occupational Psychology Team (OPT)

Background

OPT are Ministry of Defence (MOD) Civil Servants who work alongside military staffs. Historically psychologists have worked with the Armed Services since the First World War. At its peak, the civilian occupational psychology community included several hundred personnel, but numerous organisational restructuring has significantly reduced the number of in-house psychologists. OPT had for several years been part of a larger science research department. However in 2002, following a process organisation review, OPT personnel split from this science group and moved

into a new personnel and training policy directorate (which later became a strategy

directorate) to provide research evidence and advice.

Pre-change. At this point OPT was primarily regarded as a research cell

(staffed by psychologists) and consisted of nine staff (in order of seniority): one senior

principal psychologist, one principal psychologist, three senior psychologists (of which

I was one), three higher psychologists, and one university placement student. It is

important to note that the psychologists operated as a single research entity reporting to

an RAF 1* officer, with the day-to-day line management chain provided by the civilian

senior principal and principal psychologists. OPT's remit was to provide occupational

psychology advice and consultancy by conducting in-house research on a demand basis.

Trigger event. The trigger event which initiated the organisational change

process was the decision to disband the research cell as a single group; fully integrating

the staff it into the policy directorate by splitting the team up between the 'personnel'

and the 'training' sides of the directorate. This decision was taken by the RAF 1*

officer in charge of the policy directorate. Crucially, facilitation of this integration

required the disestablishment of the senior principal and principal psychologist posts;

the incumbents of which would therefore lose their current job[2]. From the perspective

of OPT this event was totally unexpected, partly because having experienced recent

restructuring they had managed to maintain the team's size and shape and therefore felt

'immune' from further change. Furthermore, the change was radical in the speed, the

execution and the nature of the decision. The decision was announced in April 2004

and reorganisation took place within two weeks (the timeline would have been shorter

but the Easter break fell between the announcement and the following action). It should

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[2] As Civil Servants, these individuals would not be made redundant but be re-deployed to another part of

the organisation.

be noted that the reorganisation took place whilst the disestablished staff were still working in the department, albeit actively looking for alternative jobs.

Post trigger event change. OPT experienced further organisational changes over the next four years including re-location, changes to their remit, expansion of their services, team restructuring and implementation of homeworking. Crucially, unlike the initial trigger event and radical change, the subsequent change events and processes were emergent and OPT was fully engaged throughout, in some cases being the instigators of the change. At the end of this period OPT was still fully integrated within the strategy directorate (the successor of the original policy directorate) but had returned to operating as a single team. Crucially, however at the end of the case study the team has a clear remit of informing personnel decisions through the definition of organisational issues, the provision of high quality evidence from both internal and external sources, and the determination of sound recommendations for action.

Figure 1 presents diagrammatically the different organisational structures OPT worked in from April 2004 to March 2008. As aforementioned, before the trigger event, the nine psychology staff worked directly to the RAF 1* officer as a separate research team, albeit within the policy directorate. After the trigger event, and up until December 2005, the integration of the team involved splitting the remaining seven psychology staff between the personnel and training areas. Each of these areas was headed by an RAF OF5 officer. Finally, from January 2006 to March 2008 (and up to the present day) OPT was structured once more as one unit (as opposed to being spilt between personnel and training areas); again headed by an RAF OF5 officer.
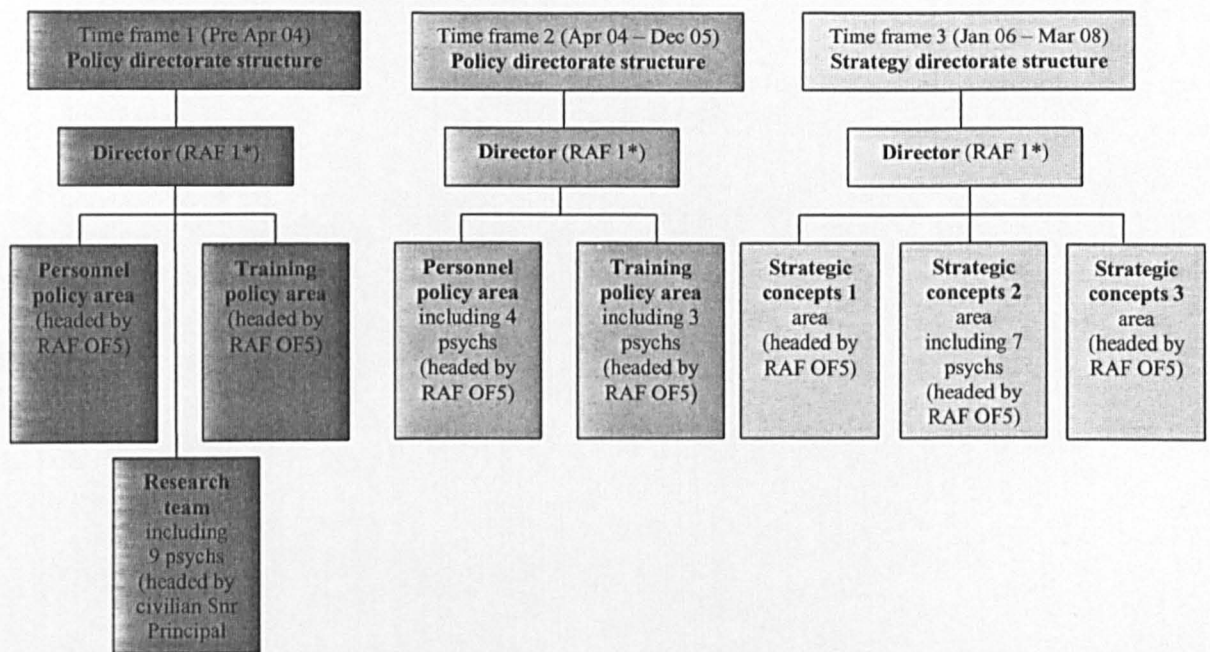
Figure 1: **Occupational Psychology Team Organisational Structure Changes During the Case Study.** The figure shows the different organisational structures in which OPT have worked between April 2004 and March 2008.

Findings

Critical Incidents

The findings are presented by the themes which emerged during analysis, to convey more impact from the findings than a chronological description. This approach provides a basis for interpretation and assists the generalisation of the findings, which would be less straightforward if the results focused on specific events particular to this case study. However, it is important to note the critical incidences and change phases that occurred during the four year case study. The events were organised into five distinct periods or 'change phases'. These change phases were not equal in length of time but instead were defined by the critical events that occurred during that phase. The critical events and change phases are presented in Table 3.

Emerging themes

A number of themes emerged from the case study and can be grouped into two

categories: *process* and *outcomes;* the latter category of outcomes was further divided

into factors which have *changed* during the course of the case study, and those which

have *not changed (Table 4).*

Table 3

Critical Events and Change Phases of the OPT Case Study

Date	Change phase	Trigger	Key events & activities
Apr 04	**Shock** Disbanding research cell.	Unexpected announcement.	• Senior principal & principal psychologist management posts disestablished. • Research cell ceases to exist.
May 04 to Sep 04	**Integration** Full integration into policy directorate.	Work to ensure integration.	• Reassurances about job security. • New line management. • Briefing staff on work programme. • Interim period before staff re-deployed. • Integration plan. • Staff exits. • Psychologist split between personnel and training policy. • Office moves. • Shift of work emphasis. • New group fully functional.
Oct 04 to Aug 05	**Stability & Flux** Period of bedding down before more change.	Refocus of work output.	• Refocusing of work to contribute to policy development and evaluation. • Working more closely with policy staffs. • New staff. • Uncertainly about future structure and location. • Announcement of co-location decision.
Sep 05 to Sep 06	**Planning** Planning for relocation and refocus.	Decision to set up new strategy directorate.	• Decision to set up new strategy cell in place of policy directorate (OPT to be part of the strategy directorate). • Psychologists plan for future. • Stakeholder and team SWOT analysis. • New strategy cell stands up. • Designing new ways of working.
Oct 06 to Mar 08	**Adjustment** Adjusting to new location & roles.	Relocation to new site.	• Relocation to new site. • Implementation of new ways of working including homeworking for some staff. • Adjustment to new location & role within HQ. • Repeat stakeholder and team SWOT analysis. • Staff changes. • New integrated HQ stands up. • Proposals for further change.

Table 4

Emerging Case Study Themes

Theme category	Individual theme	Summary of findings	Examples of individual observations
Process	Radical change	Unforeseen decision to fully integrate research team into policy directorate necessitating disestablishment of staff. Emotional reactions to the event.	No notice of decision/announcement. Absolute shock by all, followed by anger. Sense of mistrust. Concerns over job security.
	Continual change	Over period of four years the team has experienced multiple change events. In comparison with the previous 10 year period there had been a period of stability (in 1994 the research team – over which only one psych was still in the team - had relocated from Cambridgeshire to Gloucestershire) – the only major organisational change was a move of the psychology team into the policy directorate.	Examples of change - Change from policy to strategy directorate. Office moves. Relocation to new site. Homeworking. Change to remit & expansion of role. Change to team and directorate structure.
	Communication	Pre trigger event - psych team operating in vacuum / limited communication between RAF staffs and psychs. Post trigger event – improved communications in different modes: both formal and informal including day to day communications. Better psych appreciation of events with improved situational awareness.	Between Apr & June 2004 there were some 20 separate written communications regarding the detail of how the integration the psychology staffs should be implemented.
	Integration	No longer separate team functioning independently but integrated with main customer. Involvement in directorate decisions. Collective events such as team building and social activities.	Direct RAF line management. Psych staff sharing offices with RAF colleagues. Joint working and collaboration such as drafting policy papers.
	Opportunities	The requirement for psych services was determined and staff were encourage to develop and expand of their role and to promulgate their work. Later on staff took the initiative to challenge existing ways of working. Staff have become adept at pre-empting possible change in order to be proactive not reactive.	Almost immediately after the trigger event remaining senior psychology staffs were asked to recommend options based on their knowledge and experience. Staff challenged extant team structure and recommendations were implemented.

Table 4 (continued)

Emerging Case Study Themes

Theme category	Individual theme	Summary of findings	Examples of individual observations
Outcomes – what changed	Core role	Prior remit was a demand based research output no matter how small the work request. New remit focused on informing personnel policy & strategy decision making with high quality research evidence to influence change. Development of consultancy role. Team rightsized.	Development of 'devil's advocate' role to challenge stakeholder assumptions. Became main evidence contributor for key strategy output – People Campaign Plan.
	Output	Focused output to meet core role. Projects & services ceased if not delivering optimally/focused on core role. Output must add value to RAF by assisting decision making & improving working lives of service personnel. Key output of analysing & interpreting data and turning it into useful 'intelligence' for stakeholders.	Providing lectures to training courses was not core output and was phased out. Acting as research representatives & providing advice to policy working groups was regarded as core output.
	Confidence	A growing confidence in the teams' ability to be psychology practitioners, employed to provide a service not available elsewhere. Confidence stemmed from empowerment and encouragement from RAF line management, and also a recognised need to 'step up to the mark' and tackle issues head on when senior posts were disestablished.	Seek reassurance about job security. Tone of communications recommending solutions became more confident and less defensive. Senior psychs taken on new roles from disestablished staff. Asked to contribute to team and directorate issues.
	Identity	Change from research team identity to psychology team identity. Staff become better known as psychologists not as researchers showing differentiation from other professions. Professional identity acknowledged and encouraged by RAF line management.	RAF staff refer to 'their psychs' as experts. Change of post/job titles from research to psychology. Team's development (for chartership and CPD) actively supported.
	Attitude to change	Consistent and typical reactions and attitudes to change. Prior to trigger event change had been unusual and not expected. The team recognised change as a constant and have developed an attitude where if they the quickly embrace a change they can positively deal with it and capitalise from it where possible change.	Initial denial, shock and anger at trigger event. The very negative event of relocation to a new site resulted in the positive retention of staff through homeworking.

Table 4 (continued)

Emerging Case Study Themes

Theme category	Individual theme	Summary of findings	Examples of individual observations
Outcomes – what changed (continued)	Effectiveness	Change regarded as effective as team still integrated in strategy directorate. Team output regarded as more focused and effective as judged through project feedback, commendations and plaudits. These have increased markedly since April 2004. Furthermore there are direct links to how research evidence and advice has informed decisions and improved working lives.	Team awarded Commander-in-Chief commendation, and Chief Scientific Adviser commendation. Individual project contribute to policy change such as allocation of recruitment marketing budget.
Outcomes – what remained constant	Professionalism	The team remained professional throughout all the different changes despite any negative feelings. The team are bound by BPS (and HPC) Codes of Conduct and also Civil Services values. The professional approach was a source of stability in that the team could continue to be relied on and not display deviant behaviours.	Actively encouraging stakeholder feedback by developing project feedback questionnaires and reviews. Before the relocation to Buckinghamshire, attending division 'town hall meetings' despite being located 80 miles away.
	Continuity	Retaining core psych team members during the four year period (and beyond). Continuity was important as RAF colleagues have traditionally short job tenures. Understanding of corporate culture but also previous research work has been important in not 'reinventing the wheel'.	2 senior psychs only individuals within psych team and wider directorate in post before, during and after four year period. Often asked to provide reasons why decisions were made; and have maintained library of documents & records otherwise lost on relocation.
	Delivery	Team delivered core work programme in timely fashion in spite of all the organisational change including staff turnover (and loss of senior staff members).	The team delivered core projects on time despite issues such as relocation requiring training on & change over to new IT and long term staffing gaps.
	Positivity	Despite initial negative reactions to the trigger event and other organisational change such as relocation, the team has remained positive throughout the period.	The team are often commented on having 'outbreaks of morale' in the office when discussing work.

Interpretation

The Process

Radical change. The initial trigger event was of a radical nature, something of

a shock and awe style, or as Huy (2002) described "discontinuous and unpredictable"

(p. 32). This was highlighted by strong leadership who initiated a "swift break from the

past" (Duncan et al., 2001, p. 14). Such an approach is adopted to break previous mind

sets and frames of reference also known as "frame bending" (Greenwood and Hinings,

1996, p. 1024); and even though senior management did not explicitly acknowledge it,

they may have believed this was necessary in order to facilitate transformation within

OPT and delivery of its output. This had the effect of 'driving a wedge' between the

disestablished and remaining staff, and as such altering the orientation of the group

(Miller, 1982). It is not unfeasible that if the team had more notice or inclination of the

impending change that they may have rallied around each other and made a protest

against the forced change. The remaining members of OPT were left 'shell shocked', in

denial and torn between feelings for their colleagues and immediate concerns for their

own job security. Staff also felt a sense of injustice as their psychological contract had

been violated and questioned their sense of control over their employment (Kickul,

Lester and Finkl, 2002). The result of this was to make staff feel undervalued and to

question their working relationships. Senior management realised the need to explain

this breach of trust to the remaining OPT staff and remind the psychologists they were

valued and an asset (Kickul et al., 2002). This however, only included the remaining

staff and not the psychology staff who were losing their jobs. This reassurance was the

key to following up the radical change style of the trigger event so as to ameliorate

some of the negative reactions of staff. Crucially, the senior management

acknowledged that staff were unhappy and were resistant to the change, and so their

emotional responses were not disregarded. This sensitivity was something of a surprise

to the OPT members; especially as on one hand senior management had taken a hugely

unpopular decision, and on the other hand had acknowledged the affect of this.

Continual change. After the initial phase of radical change, OPT was exposed

to continual change over the next four year period. This continual and evolutionary

change was interspersed with 'revolutionary' change periods of "substantial turmoil"

(Choi, 1995, p. 608) in part due to major structural changes within the organisation and

the relocation of the team to a new site[3]. The continual change was certainty a

prolonged period of disruption and was characterised by change almost becoming the

new norm (Worrall et al., 2000). As with many employees, OPT was used to seeking

consistency and predictability at work (Huy, 2001) and prior to 2004 this had been

achievable. However, over the next four years OPT had to acclimatise to a less settled

context including the regular turnover[4] of their military colleagues and line

management, as well as exit of psychology colleagues. There were of course periods of

stability and opportunities to consolidate before new change, although 'change'

remained the primary paradigm. Farjoun (2010) presents the idea that stability and

change which are likely to occur simultaneously, can be harmonious so that necessary

and familiar routine which provides continuity can still exist alongside innovation and

transformation; and this case study would support that notion.

Communication. Although the radical change approach was successful in

galvanising and forcing change, it was unexpected because there was no prior

communication about what would happen to OPT. This meant that there was no

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[3] These organisational changes were in addition to the OPT change, and were part of a wider

departmental programme.

[4] As a result of their shorter job tenure.

opportunity for negotiation for position or contribution to the decision making. Prior

communication would have not had the 'regrettable' shock and awe effect. Once the

trigger event had occurred, and it was clear that change was going to take a particular

course of action, communication did improve and this continued in abundance. The

psychologists had been operating in a vacuum within their directorate where psychology

and policy staffs alike had little knowledge of each others' work. Consequently, the

increased communication gave OPT access to information which was previously

unavailable.

The improved communication was important for two reasons. Firstly, it was

vital for building effective working relationships, as well as keeping the team up-to-date

with internal issues. Previously, this type of information had been dealt with by the

psychology management and not necessarily disseminated to other psychology staff.

Within the new set up the remaining staff were grateful of the opportunity to join in and

be privy to discussions such as work prioritisation, liaisons with outside agencies, staff

changes and restructuring, and policy development, from which they had previously

been excluded. The second issue was what this better communication represented. The

communication was characterised by being of a consultative nature; rather than purely

transmitting information to the team (Kotter and Schlesinger, 1979). Therefore OPT

was, and crucially felt, conferred with when members were asked for their advice and

opinions. Whilst this had occurred within the original OPT prior to the trigger event it

was considerably less consultative and often did not include military colleagues. This

increased communication reinforced the team's feeling that they had operated in a

vacuum which had not enhanced their reputation or ability to deliver.

Furthermore, because OPT was now being consulted about its future, this again

demonstrated value in the team's expertise. This helped allay further fears and acted to

re-balance the team's emotional reactions to change (Huy, 2001). Ultimately, the

psychologists needed to build trust in their new line management chain (Mishra, 1996)

and the new open and honest communication channels were an ideal medium for this by

helping to reinforce initial commitments made to OPT, for instance about their job

security after the trigger event.

Integration. Having OPT fully integrated within the policy, and later strategy,

directorates changed the way in which the team functioned and how it was utilised.

Instead of operating almost independently of their main customer, the team was able to

adapt to the needs of the policy and strategy staff. Importantly it was able to deliver a

collaborative service providing vital research evidence as well as advice to support and

develop policy and strategy. This meant having military rather than civilian line

management and significantly being treated as a 'full member of staff' within the

directorate not as an adjunct to it. Psychologically this was important for OPT because

it made them feel part of a wider team to which they could see how their contribution

made a difference; again further engendering a sense of value for the team's output.

Interestingly, after the trigger event OPT was split up amongst the directorate to

facilitate integration, however when the directorate restructured at the start of 2006 the

team was reformed as a single cell. By this stage however, the sense of integration was

'second nature' for OPT and therefore the recreation of the cell did not recreate a sense

of separation from other directorate staffs.

Opportunities. A previous organisational review had recognised the potential

that psychologists could offer in terms of research effort and provision of robust

evidence, and the full integration of the team allowed for the opportunity to capitalise

on this. From a purely business sense, the policy/strategy directorate needed the

psychologists to help develop evidence based policy/strategy and as such they wanted to

better exploit this resource. From OPT's perspective, demonstrating value and delivering a valued output was the team's *raison d'etre* and paramount for its survival in an organisation which had already demonstrated an ability and willingness to disestablish services. Furthermore, after the integration, OPT had better visibility of current and future policy/strategy development and so were better able to determine how best to deliver an effective service and contribute to this work. Capitalising on these opportunities made OPT members feel more secure with its role and the requirement for its services.

The Outcomes - What Changed

  Core role. OPT had always recognised that it had a core role in providing high quality evidence for policy/strategy development; and as such this role was instrumental in the delivery of its directorate's output. Identifying with this core role had positive outcomes because it gave the team members something to latch onto during transition; that is, by being able to understand their purpose and 'reinvigorate' their loyalty for the organisation (Guest, 1987). Again, being able to see how they could contribute and to observe the difference their services made was a motivating factor for team members, as it is for many other employees occupying in-house specialist roles (Jindal-Snape and Snape, 2006). What had changed was how OPT 'stepped up to the mark' and accepted the challenges this role brought especially in making the team more visible and more accountable for its work. Better utilisation of the psychologists was the impetus for the trigger event and carving out a core role was instrumental in the team's utility.

  The decision to integrate the psychology team and to better employ its services suggests that the radical change was not driven by the need to downsize or re-structure the team such as might be the case when cost saving, but was far more strategic in nature with a long term aim in mind (Kozlowski, Chao, Smith and Hedlund, 1993). It

could be argued that the team was subjected not to downsizing but "rightsizing" (Hitt, Keats, Harback, and Nixon, 1994, p. 18) where personnel numbers are reduced but the team's competence is retained and nurtured. The delivery of evidence based research and practice (Rousseau, 2006) eventually led to the development of the OPT vision of *informing decisions to influence change* which succinctly described its contribution to organisational decision making.

Output. The output of OPT had to be tackled on three fronts: what OPT contributes, how it contributes and what influence this contribution has. The delivery of the core role evolved over the four year period to the point where directorate colleagues understood what and how OPT delivered its output. This evolution was in part driven by OPT being confident about what it could offer and from addressing key stakeholders' requirements. With the OPT's core role better understood and established it was more able to align its output to the needs of key stakeholders. The decision to integrate OPT into the policy/strategy directorate ensured closer working relationships with military colleagues and better communication as to the appropriateness of OPT's output. To assist this process, two stakeholder evaluations of OPT's services, its output and its performance were conducted to better understand stakeholder needs, to correct any reported weaknesses and also to counter any possible threats.

Both stakeholders and OPT regarded the provision of independent and scientifically rigorous evidence as a key output of the psychology team. OPT recognised that this output could be enhanced by not only investigating and monitoring issues internal[5] to the organisation, but also observing and monitoring external sources[6]. This allowed OPT to present a well informed picture of key influences, behaviours,

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[5] Internal scanning using questionnaires, interviews and focus groups.

[6] External scanning using external research, monitoring of societal trends.

attitudes, expectations and intentions which can be tracked over time (Figure 2).
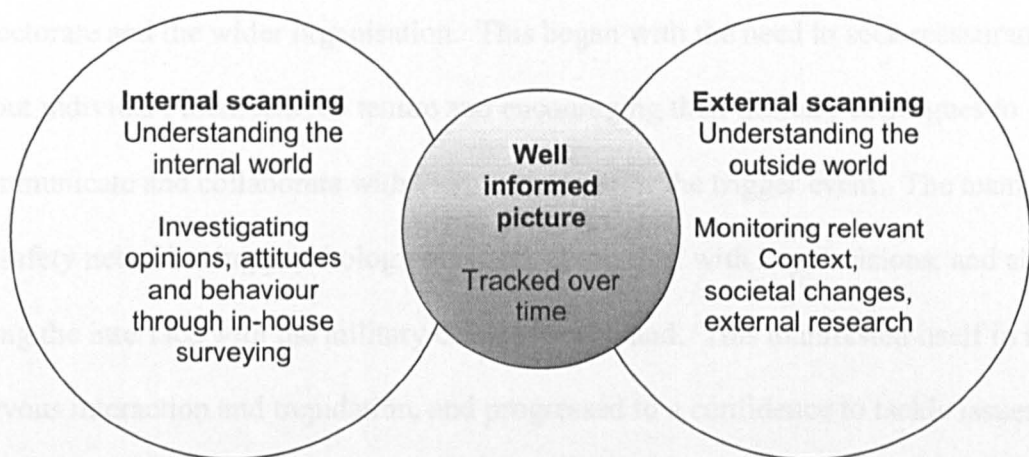
***Figure 2*: Occupational Psychology Team Research Approach.** The approach adopted by OPT is to collect primary evidence from internal scanning research and collate secondary evidence through external scanning to provide a well informed picture of serving personnel attitudes and the context in which these attitudes are developed and exhibited.

In addition, it was agreed that OPT brought an alternative perspective to issues by challenging, questioning and offering different view points. This was achieved through a strategic and future focus, considering the implications of the evidence so that it was no longer just information but intelligence for the organisation. At the start of the case study, stakeholders recommended greater coordination and visibility of OPT's output; and the team hoped this would lead to a greater influence on key personnel and training issues. Certainly, over time OPT's visibility and influence has improved through establishing a core role. This influence, however, has not been consistent or as great as it could be. A continuing challenge for OPT will be to disseminate research findings and organisational 'intelligence' to a senior audience capable of actioning change, but who may not necessarily like the evidence which is presented to them. This is a constant sense of frustration for OPT and can lead to individual members feeling

disheartened with their efforts.

Confidence. OPT has grown in confidence in both function and role within its directorate and the wider organisation. This began with the need to seek reassurance about individual members job tenure and encouraging their military colleagues to communicate and collaborate with them; shortly after the trigger event. The team lost its safety net of having psychology management to deal with key decisions, and also being the interface with the military chain of command. This manifested itself in initial nervous interaction and trepidation, and progressed to a confidence to tackle issues head on and to anticipate challenges in order to plan for change and offer viable solutions. This was very much in evidence when the senior psychologists recommended, and had accepted, changes to the team structure in 2007. This request was significant in allowing OPT to shape its future structure and not have it dictated to them. With positive reinforcement, the psychologists have been able to exert their position; and have found other staff to be responsive, cooperative and inclusive towards them. Furthermore, the senior psychologists have had to take on roles previously undertaken by their principal staff such as international collaboration. The growing sense of confidence has allowed OPT to take risks and adopt a 'nothing ventured, nothing gained' attitude not dissimilar to a promotion approach of self-regulation (Taylor-Bianco and Schermerhorn, 2006). This has helped OPT regain a sense of control over their destiny (Ng, Sorensen and Eby, 2006) arguably a state of mind not experienced in the first few weeks following the trigger event.

Identity. Probably one of the most intriguing outcomes of the changes OPT experienced was how the team's sense of identity as psychologists has been reinforced and recognised throughout the change period. Previously, OPT staff were considered to be social researchers, and indeed team members often described themselves by the

methods they employed rather than the value they could add. At the end of the case study OPT was widely regarded as a group of psychologists able to provide a research consultancy service. This sense of being a psychologist was reinforced by military colleagues using the title 'psychologist' to describe individual OPT members and regarding the team as 'experts', calling on OPT to provide specialist knowledge. Essentially nothing had changed in terms of the fundamental skills and knowledge sets of OPT; however, team members were now more openly recognised for having such attributes. An unexpected outcome of the change was that the very individuals responsible for disbanding the original OPT cell were now reinforcing and encouraging the psychologists to be psychologists.

This sense of identity, in a similar vein to the team's core role, provided stability through transition whilst at the same time evolving and changing itself. Ultimately, and perhaps ironically, it was military staff who reignited OPT's sense of identity as psychologists, for instance by allowing the term 'psychologist' to be used in their job titles. As a result, OPT members were far more confident to represent themselves as psychologists. This encouraged a strengthening of their professional ties with other psychologists in the organisation (Lave and Wenger, 1991) and an understanding of the connection between their sense of identity and their professional practice (Wenger, 1998).

Attitude to change. OPT has developed a proactive and positive approach to organisational change. This was partly developed as a necessity because of the continuous change they had experienced, in this way reducing the cognitive dissonance and sense of incongruence between different attitudes (Festinger, 1957). At the beginning of the case study, the team reacted in expected and typical ways and followed Scott and Jaffe's (1988) proposed four change phases. They noted that individuals often

have initial denial, subsequently resisting change before gradually exploring the change and eventually committing to it. OPT members did feel a sense of denial but this passed very quickly when the reality of change was swiftly implemented. Even resistance was relatively short lived as individuals realised they still had to 'get on with the day job'.

As the team experienced further organisational changes, members realised that they were more able to influence change if they themselves were engaged and improved their receptivity to change (Huy, 1999). One reason for much of their initial resistance came from their place and social attachments (Inalhan and Finch, 2004; and Rooney, Paulsen, Callen, Brabant, Gallois and Jones, 2010) and the associated emotional connections that had formed (Milligan, 1998). Individuals had a sense of history and shared experiences based around the original OPT and its office environment which was upsetting to see come to an end.

This unsurprising negative reaction to change was to some extent because of a sense of loss or uncertainty (Kotter and Schlesinger, 1979), and also a loss of control in determining the team's own future, making members resistant in the first instance to the trigger event (Strebel, 1996). This trigger event was however only a catalyst and further change (some of which was organisation wide) required OPT to have to adapt to continual change which at times was evolutionary and at other times revolutionary. One of the team's methods for dealing with change was to make sense of it in relation to the team's circumstances and to seek stability, much like the model of punctuated equilibrium (Tushman and Romanelli, 1985). Consequently, by being more receptive to emerging change OPT became more willing to recognise the legitimacy of proposed changes (Huy, 1999). This may well be because OPT developed a new 'lens' through which change is interpreted (Palmer and Dunford, 2008).

Effectiveness. It is important here to refer to how effective OPT was in

delivering its services and output. Did the change really make a difference, and was it the impetus that OPT needed to better align themselves with their key stakeholders and deliver an optimal service? It has already been suggested that the restructuring of the team was not as a result of simple downsizing but a strategic requirement (Kozlowki et al., 1993). One indicator of success could be that the team remained embedded within the strategy directorate delivering a core role of evidence provision. Furthermore, the team did not suffer any more job cuts. In terms of delivery, OPT's efforts were linked to the organisation's personnel agenda and the team's evidence used to help prioritise personnel spending. Customer feedback was very positive with many sponsors actively implementing research recommendations. Significantly, the team received several accolades including team bonuses, letters of gratitude and recently (post the end of the case study) a Commander-in-Chief's Team Commendation in the New Year's Honours List and the MOD Chief Scientific Adviser's Team Commendation.

The Outcomes - What Remained Constant

      Professionalism. OPT remained professional throughout the change process in its dealings with colleagues, management and stakeholders, and in its approach to work. As psychologists this might be regarded as a given, but as Raelin (1984) showed, in-house specialists can adopt deviant behaviour when they react negatively to incompatible expectations. For instance, it would not have been unsurprising for the psychologists to retreat into their 'professional world' and become unwilling to contribute to work wider than their professional remit or role (Evan, 1962) such as office re-organisations or administrative matters. However, as Civil Servants, OPT staff are required to conduct a range of managerial and administrative tasks in addition to those of a psychologist; and so displaying deviant behaviours would have been incompatible with both the BPS code of conduct and the Civil Services values.

Furthermore, deviant behaviour would not have encouraged line managers to be supportive of OPT staff, their output or their advice. The strength of the OPT's professional affiliation to psychology provided a constant sense of stability (Hogg and Terry, 2000) and this was reinforced by affirmation of its specialist status (by line management). This sense of professionalism could be related to psychology being viewed as a vocation and as Sachs (2001) noted about having "a shared set of attributes, values ..... [to] enable the differentiation of one group from another" (p. 153).

Continuity. OPT retained core staff during the change period. Traditionally, psychologists have longer job tenures than other Civil Servant colleagues and significantly longer than military colleagues; that said the team experienced regular turnover of staff and often had to deal with vacant posts. Key to how OPT successfully dealt with the various organisational changes was in having a core number of staff for the entire change period (four years). This meant the team did not 're-invent the wheel' every time a new change occurred because it had prior knowledge of what worked and did not work for the team; as Huy (1999) put it the "know-how and know-why" (p. 338). It also meant that the team retained core corporate knowledge and maintained its experience levels. This continuity ensured that OPT maintained a level of understanding vital for in-house practitioners; of something Kransdorff (1996) described as the "corporate culture, management and communication style, and the detail of recent events" (p. 31).

Delivery. OPT continued to deliver its core work programme in a timely fashion despite the organisational change challenges it faced. Central to OPT's effectiveness was the ability to deliver a high quality, timely and relevant output which has been developed with its stakeholders; and OPT actively maintained this standard throughout. This was compounded by staff turnover and shortages, but conversely

facilitated by the retention of core team members. One reason for OPT's ability to

continue to deliver, appears to be the team's organisational commitment and sense of

loyalty to the organisation. Iverson (1996) regarded organisational commitment as a

hugely significant determinant of attitudes to organisational change and therefore

perhaps OPT members' strong sense of commitment and duty contributed to their

positive attitude. OPT's professional approach also appeared influential to maintaining

their standards.

   Positivity. One of the significant and enduring issues throughout this case study

has been an affective state. Given that one aim of this study was to better understand

the impact of emotions during organisational change, this was an important outcome

(Huy, 1999). Even more important was that this emotional reaction was a positive and

not a negative affect. OPT members retained a positive attitude even when they

disagreed with and resisted the organisational change. This might appear a paradox that

the team could be positive whilst exhibiting a negative reaction. It is perhaps more

accurate to state that in spite of their experiences, OPT maintained a positive outlook

that 'things would get better' and reflected the true sense of positivity in that OPT

members were encouraging a successful outcome (Seligman, 2000). This was

particularly evident during prolonged staffing gaps or changeover of line management

which during the case study was on four separate occasions.

Professional Introspection

   One of the aims of this study was to determine if knowledge of organisational

change processes would influence how OPT members dealt with their own

organisational change; or perhaps make them deal with it differently? An answer to this

proposition was investigated by observing the team's responses and behaviours rather

than comparing them with another group. The overall conclusion was to confirm that

knowledge of the process, that is, an understanding of organisational change did appear to influence the outcome of the radical change but not necessarily the process. OPT members reacted in 'typical' ways to the trigger event displaying almost "moral outrage" (Huy, 1999, p. 328) in their resistance to the disestablishment of the original team. The intensity of emotions was also far greater and most prominent at the beginning of a change process (Fugate, Kinicki and Prussia, 2009). The team members appeared to react in inevitable and normal ways (Bovey and Hede, 2001) showing anger and feeling upset but significantly their 'cycle' of denial through to acceptance (Vakola and Nikolaou, 2005) seemed to be swift rather than protracted. This might have been because this case study was from the perspective of the 'survivors' (Brockner, Graver, Reed, and DeWitt, 1992) or because the culture provided support through competent line management aware of emotional responses to change (Huy, 2002); although an alternative interpretation is offered.

The psychologists' professional background had a bearing not on their reaction but on their actions. Professional background can be defined as their knowledge of organisational change and also their ability to critically appraise situations. The psychologists felt upset by the trigger event but quickly (the next working day) 'stepped back' from this event and started to rationalise their reactions by focusing on the consequences of this event. This mirrors Bovey and Hede (2001) who found that individuals who had irrational ideas during organisational change were more resistant to change. This allowed the remaining staff to swiftly move from a state of resistance to receptivity (Huy, 1999), albeit the timescales were different for each individual team member (Carnall, 1986). In summary, knowledge of the process of organisational change did not prevent the psychologists' reactions, but they understood why they experienced particular emotional responses and acknowledged that expressing these

would be cathartic (Huy, 1999). Importantly their training gave them a more rational

perspective to look objectively at issues and move forward. This tactic was regarded as

positive by OPT's management and a sign of commitment. The psychologists'

receptive response to the trigger event and subsequent change could well be attributed

to their knowledge and training.

Another aim of considering professional introspection was to look at whether the

organisational change improved team delivery and output and in some respects this has

been covered by the outcomes of 'output', 'effectiveness', 'continuity' and 'delivery'.

It is clear from the overall outcomes that the organisational change benefited the team as

it capitalised on change opportunities and improved its output and delivery as required;

at first in response to the radical change event and later as they anticipated stakeholder

needs.

Rival Explanation for Outcomes

Yin (1994) suggested that researchers should consider rival explanations when

interpreting case studies, that is, consider if events and the outcomes would have

occurred irrespective of any intervention or influence. In this case, that would have

meant that positive outcomes such as OPT's performance and delivery would have

occurred anyway and as such the radical change brought on by the trigger event was not

necessary. Clearly changes to the team structure would not have occurred without

external intervention, for example, individuals would have been very unlikely to

'sacrifice' their post to assist integration, although perhaps improved effectiveness and

success could have been achieved regardless of this event.

The senior RAF management who decided to disestablish staff and integrate

OPT did not regard the team's potential to be exploited in its pre-2004 structure.

Greenwood and Hinings (1996) noted that radical change is often referred to as "frame

bending" (p. 1024) because of the need to break with previous conventions and create a 'fresh start'. Prior to the trigger event there was some discussion within OPT to focus services and output, but there was also resistance of this from the team's senior psychology management. It is feasible that changes to services and output such as developing OPT's external scanning capability might have occurred but perhaps in a much slower timescale.

Significantly, OPT would not have been so closely aligned with their stakeholders because integration on the scale required could not have been achieved within the existing OPT structure. It appeared that explicit integration of OPT into the policy and later strategy directorates was required in order to fully exploit the psychologists' services. This was possibly because familiarity and day to day working was necessary for this exploitation as it was the most efficient way for key stakeholders to properly understand what OPT did and could do. It is feasible given the wider organisational changes that were happening during the case study that OPT's survival could have been threatened without this radical change if its value had not been sufficiently recognised and utilised.

Discussions, Reflections and Lessons Learned

A number of key insights emerged from the OPT case study both for the team's continued development and also for wider radical change implementation.

Radical Change

Radical change refers to altered work philosophies (Huy, 1999) and not necessarily the speed of the change. Radical change is often adopted in order to break with previous mind sets (Greenwood and Hinings, 1996) and provide the required impetus when current circumstances are failing to deliver. This approach to change can appear dictatorial but it can galvanise action when time is limited and significantly

when change is opposed but is pivotal to survival (Dunphy and Stace, 1988). In this case study an occupational psychology team experienced a period of continuous change precipitating by a radical change event. The key themes which emerged from this study were related to both the process and outcomes of change. From these findings several conditions for successful radical change are proposed.

Conditions for Successful Radical Change

The radical change process must have an aim and a method of measurement to determine if the desired outcome has been achieved. It is fair to say that the four year period of this case study was not a fully planned transformation but the vision of improving the services, delivery and output of OPT was there at the inception and was a constant aim. Success in this case study was determined by the ability of OPT to deliver a more effective service and this was measured by the plaudits and positive feedback the team received. It was also measured by the explicit contribution and tangible benefits derived from OPT's work. This success however, was not achieved because of one radical change event but a number of conditions that supported OPT and ensured the change aims were achieved.

The first condition for radical change appears to be decisive leadership (Greenwood and Hinings, 1996). Frame bending requires strong leadership to take the initiative and implement a potentially unwelcome change; often limiting negotiation with those involved. In this case study the leadership was not in OPT and therefore it is proposed that someone who has a more strategic perspective is best placed to instigate the radical change because they can appreciate which mind sets and 'frames' are holding back progression and success. Of course this very perspective and subsequent action will contribute to a sense of mistrust amongst those affected which further fuels resistance to the proposed change (Huy, 1999).

This resistance is a normal reaction to organisational change (Kyle, 1993) and OPT reactions were typical. The change was punctuated with natural and expected responses as the team moved from known circumstances to unknown territory (Kyle, 1993). Significantly, RAF line management provided the space for psychology team members to react and voice their concerns. This is a crucial requirement for radical change (Huy, 2002). By observing emotional responses managers can see how individuals react and can be prepared to permit staff time to resist change and be angry about what is happening. Management's recognition and acknowledgment of typical and natural emotional responses is an important support mechanism and condition in cases of radical change. This requires management who are involved in the radical change to have an understanding of these emotional stages (Scott and Jaffe, 1988), and indeed rather supposes that the organisational culture will support line managers in their efforts to help their staff work through their natural resistance (Huy, 2002). Recently Sanchez-Burke and Huy (2009) proposed the theory of emotional aperture regarding a manager's ability to recognise and respond to staff's collective emotions during organisational change. They suggested good managers had high emotional intelligence and therefore were able to appreciate individuals' emotional reactions. Smollan and Sayers (2009) also found that when emotions were acknowledged, staff became more engaged and receptive to organisational change.

Managerial support must continue throughout the change phase by nurturing staff in the medium and long term (Parker, Chmiel and Wall, 1997), encouraging their strengths and talents and showing staff that they are valued (even after subjecting them to radical change). In this case study, OPT was integrated into a larger team which provided team members with ongoing support and open communication. Indeed, Mintzberg (1998, p. 146) observed "professionals require little direction and

supervision. What they do require is protection and support". This type of support can

help maintain momentum and assist employees' attitude adjustment. Management must

capitalise on available resources (Fiol and O'Connor, 2002) and encourage staff to

become involved and engaged with the change; and this will help staff to move from

resistance through receptivity to acceptance (Vakola and Nikolaou, 2005). Di Virgilio

and Ludema (2009) have suggested that managers can increase this engagement by

regularly conversing with staff thereby invigorating interest and autonomy, and there

was evidence of the success of this approach in this case study. Another tactic

management might use is to strengthen individuals' and teams' identities; that is, those

aspects of their role and/or profession which helps reinforce people's sense of

competence and usefulness (Hogg and Terry, 2000). This sense of identity can also

anchor staff in the familiar, because even if there is a desire to break from the past it is

unlikely that all past experiences are negative, and as such provides a comforting sense

of stability and continuity (Hogg and Terry, 2000). Furthermore, using experienced

staff to enhance a sense of continuity can assist the process further (Huy, 1999).

Conducting the Case Study

The case study approach allowed a more in-depth and exploratory study of

organisational change. Furthermore, this research method allowed for the examination

of emotional reactions through participant observation. The study of emotions has been

neglected in organisational change research (Eriksson, 2004), and which is only now

receiving more attention (e.g. Maitlis and Sonenshein, 2010). Fineman (1997) argued

that emotions are not by-products of organisational change but instrumental to it, and

will enrich any study or organisational functioning. Certainly in this case study the

observation of emotions added a new dimension to the data.

One major issue for analysing and presenting the case study was how to tackle

the data. It is recognised that a case study approach can generate a large volume of data and it is necessary to focus constantly on research objectives; in this case understanding the radical organisational change process and OPT's response. As Eisenhardt (1989) stated, the research focus can be quite general but must direct the study. The large volume of data generated, especially from observations, made analysis cumbersome at times and therefore it was difficult to decide what to omit from the report. This is one reason why the results were presented thematically and not chronologically following the various change phases. This therefore was a distillation of the key themes which emerged from the analysis, but it is acknowledged that it can leave the reader not fully cognisant of the events which led to those conclusions.

Furthermore, alternative approaches to analysing the case study could have been considered. For instance, it is acknowledged that this case study could have taken a political perspective, and there was almost certainly organisational politics and agendas at play in this case study. Indeed the political nature of change has been frequently acknowledged (e.g. Dawson, 2003); although, Buchanan (2008) argued that there has been limited research conducted regarding organisational politics and how this is perceived in the UK. However, given the sensitive and contemporaneous nature of the case study it seemed unlikely that eliciting candid information (Buchanan, 2008) would be possible; especially as I was a participant-observer and independence could well have been an issue.

This case study could also have investigated the impact of organisational culture. The influence of culture was implicit in the study in so much that it was likely to have affected the way in which the managers supported the psychology team. It was also likely to have influenced the way the team expressed their emotions (Smollan and Sayers, 2009); although having a professional identity separate from the organisational

culture may have moderated the psychologists' reactions. Furthermore, this case study

was complicated by the fact that there were two simultaneous organisational cultures at

play – the MOD and RAF.

Finally, the case study could have considered more closely the difference

between and affect of both positive and negative emotions. Emotions have been found

to reduce the effectiveness of organisational change implementation (Bartunek, 1984).

However not all emotions are negative or have negative effects and have been shown to

facilitate staff's understanding of change (Maitlis and Sonenshein, 2010), or at the very

least alert individual's to potential issues such as a reduced sense of well-being

(Sonenshein, 2009).

Contribution to Knowledge and Practice

My study contributes to both occupational psychology knowledge and practice.

In terms of the radical organisational change literature, the findings support the

presence, in an applied setting, of the key characteristics of radical change; for instance

being discontinuous and unpredictable (Huy, 2002), frame bending (Greenwood and

Hinings, 1996) and a swift break from the past (Duncan et al, 2001). This support is

important as research in the field of radical change is still limited. This may be because,

as suggested by Baum and Rowley (2002), that organisational change theories are

ironically resistant to progress especially when looking for legitimisation.

Alternatively, the specific frame bending nature of radical change is lost in the general

discussion regarding the effective management of organisational change and so is

merely recorded as a form of organisational change (e.g. Taylor-Bianco and

Schermerhorn, 2006) rather than being the focus of the research (e.g. Kickul et al.,

2002). The focus on radical change was important for this case study as it drew

attention to the senior manager's decision; and need for a change in mind set and a

working situation that the psychology team took for granted (Alvesson and Willmott, 2002). Furthermore, the premise that emotional states hold much of the key to how radical change is dealt with (Huy, 1999; Fiol and O'Connor, 2002) was supported. Specifically, the findings support Huy's (1999) propositions that high levels of emotional experiencing, reconciliation and encouragement will lead to higher levels of receptivity, mobilisation and learning. In addition, this case study showed that emotions are difficult to generalise and predict. For instance, the initial reactions of team members were not indications of the likely level of or speed of acceptance; nor was the initial intensity of these emotions. Finally, the study provided a clear demonstration of typical change phases in action (Scott and Jaffe, 1988) but also showed that the duration of these phases varies; in this case because of the participants' professional background and also their emergent attitude to change.

In terms of practical contribution I have proposed conditions for successful radical change implementation which can act as guidelines for future interventions. These guidelines are based on the observed evidence and the emergent interpretation with regard to what worked; including the role of strong objective leadership, the opportunity to express emotions, and the importance of nurturing and involving staff in the medium and long term. These guidelines are also supported by various theoretical propositions including professional identity anchors (Hogg and Terry, 2000), importance of re-balancing emotional responses (Huy, 1999), and that a sense of purpose can reinvigorate loyalty (Guest, 1990).

Finally, my case study introduced the importance of professional introspection. Psychologists conduct CPD and work related activities such as project evaluation; however, research on how they perform in teams, deliver an output or how their training and knowledge might impact on their reaction to change appears not to be conducted.

This professional introspection should be encouraged in order to develop the discipline.

While there have been papers on the practitioner-academic divide (e.g. Anderson,

Herriot and Hodgkinson, 2001) there remains a need to conduct research on how

psychologists 'do what they do' and ensure they deliver a valued and needed service.

Conclusions

My findings demonstrate that whilst radical change can be unwelcome, and is

likely to cause initial resistance, it can also be the catalyst for important development

and transformation. The case study showed that positive outcomes can occur as a

consequence of radical organisational change and I conclude that the resultant

transformation of the occupational psychology team would not have happened in a

similar manner or timeframe without a radical change approach. Although my research

was a case study, which has associated disadvantages, it was longitudinal and in

following a cohort of individuals has provided an in-depth observation and subsequent

interpretation of a radical change event and the resulting outcomes. Comparing results

and interpretation with existing theoretical propositions and previous research lead me

to be confident in my conclusions. Significantly it lead me to suppose that

generalisations from the current study were entirely legitimate especially in terms of the

conditions necessary for implementation of radical change including decisive

leadership, open communication, recognition of negative attitudes and emotional

support throughout the radical change process and beyond. Furthermore, in terms of the

professional introspection of the psychologists involved, prior knowledge of the process

of organisational change did assist transformation because team members could

rationalise the process. Importantly, however, they were also likely to react in a manner

typical of any member of staff experiencing organisational change, irrespective of prior

knowledge. Finally, studying emotional responses and understanding the associated

events was very important to understanding the overall context and did not ignore a major element of the organisational change process (Maitlis and Sonenshein, 2010). Whilst results and outcomes may be the determinants of success for managers (e.g. Weick and Quinn, 1996), much research has shown that it is the less tangible aspects of organisational change which are important such as vision (e.g. Kotter, 1996), commitment (e.g. Iverson, 1996), and engagement (e.g. Fugate et al., 2009). Therefore the emotional experiences of staff during organisational change should not be neglected. My case study has shown that initial negative responses to organisational change are not necessarily good indications of future behaviour especially if staff are nurtured through the change process. Consequently any organisational change process must monitor and support staff during the short, medium and long term; and managers must be cautious of predicting long term outcomes from initial reactions. With the recent recession and the marked increase in organisational downsizing and restructuring, these results provide important lessons for managers embarking on radical organisational change.

Chapter 3: Introduction of Homeworking - An Intervention Programme

Introduction

The practice of teleworking, and specifically homeworking, is on the increase driven by individual workers' needs for a better work life balance (Shamir and Salomon, 1985), a motivation to reduce organisational estates' costs (Di Martino and Wirth, 1990), and more recently by environmental concerns (Perez, Sanchez, de Luis Carnicer and Vela Jimenez, 2004). Despite initially generous predictions of the possible take up of teleworking practices (Nilles, 1982), that is, the opportunity to work remotely from a typical office based environment (Harpaz, 2002), it appears teleworking is not as prevalent as expected (Salomon and Salomon, 1984). What is currently more accurate is that full time teleworking, perhaps in a home set up, is relatively atypical (Wilks and Billsberry, 2007) but teleworking on an ad hoc basis is more widespread (Bergum, 2007).

In this chapter I present an organisational intervention programme which sought to implement homeworking practices. This intervention was undertaken to facilitate the request for homeworking by two members of the occupational psychology team (OPT), introduced in Chapter 2. This request was triggered by the office re-location of OPT from the south west to the south east. The homeworking intervention was crucial to the delivery of OPT's service of *informing decisions to influence change* because it facilitated the retention of key team members. Whilst the intervention is very much in the practitioner domain the critical success factors have a theoretical foundation. After presenting the intervention process I will argue that the effectiveness and success of homeworking is dependent on several underpinning conditions drawn from previous research and from observations made during the current intervention. These conditions

will be presented in a model for homeworking implementation outlining key implications for practice.

The structure of this chapter is as follows:

1. Background literature - an introduction to the overarching concept of teleworking and homeworking in terms of their definition and prevalence, and the motivation to homework.

2. Problem analysis - a description of the reasoning for the homeworking intervention.

3. Solution implementation - a description of the homeworking implementation.

4. Evaluation - evaluation of the effectiveness of the programme.

5. Discussion - demonstration of the contribution this intervention programme has made to the implementation and operation of homeworking including a model of homeworking implementation.

Background Literature

Whilst this intervention programme relates specifically to homeworking, it was clear from the literature that much of the research encompassed the broader practice of teleworking. To this end, the literature review focuses heavily on this wider teleworking concept of which homeworking is a subset, albeit with its own idiosyncrasies.

Definitions of Teleworking and Homeworking

Like many organisational concepts there is a lack of agreed definitions for the practices of teleworking and homeworking (Harpaz, 2002). The reasons for this include the different types of work conducted under the banner of teleworking and homeworking (Handy and Mokhatarian, 1996); the degree of disconnect the worker experiences (i.e. the amount of time a worker spends teleworking; Harpaz, 2002); and where the teleworking actually occurs (as this may not be in the home; Mann, Varey

and Button, 2000). What is agreed is that teleworking involves the idea that one's work can be conducted remotely from a traditional place of work (for instance, an office environment) and as such relies on electronic communication to connect the worker to their organisation and co-workers (Harpaz, 2002). There is no legal definition for teleworking in the UK, however, a guidance document from the former Department of Trade and Industry defined teleworking as "the use of information and communications technologies to enable remote working from the office" (DTI, 2003, p. 7).

What does emerge when investigating definitions of teleworking and homeworking is that there are a range of variable practices within the concepts. Individuals may work part time as teleworkers; they may work from home; they may 'hot desk'; they may be mobile workers; and they may work at multiple locations (Tietze, 2002). Homeworking can be viewed as a subset of teleworking; as some teleworking may be conducted remotely from the office but not at home (for instance, the concept of 'hotelling' where individuals conduct much of their work in hotels; Mann et al., 2000). Again though, it is the sense of disconnect that prevails, and as Kurland and Bailyn (1999) described as 'anywhere' and 'anytime'. Interestingly, whilst teleworking is perhaps a more accurate description of the concept of remote working, facilitated by technology, it may not be a popular term (Wilson and Greenhill, 2004); it does however encompass homeworking, mobile working and teleworking (Gray, Hodson and Gordon, 1993). More recently, Wilks and Billsberry (2007) have suggested that the term 'teleworker' is no longer valid because of the definitional difficulties and differing characteristics of teleworkers. They recommend the alternative term "home-anchored worker" (p. 176); this however, would be limited to the homeworker not the mobile teleworker and as such fails to recognise the diversity of locations utilised by the teleworker.

The Prevalence of Teleworking and Homeworking

These definitional concepts mask the complexity of this new form of working. By focusing on the concept of remoteness and the ability to e-communicate (i.e. using email), this working practice can cover many workers, indeed many of whom are not full time teleworkers (Haddon and Brynin, 2005). In this way the estimates for the number of workers who are teleworkers or homeworkers vary greatly; especially as the numbers include individuals who may still spend the majority of their time in the office (Peters, Tijdens, Wetzels, 2003). The figures do, however, tend to differentiate teleworkers from those individuals who occasionally take work home (Hotopp, 2002) and may even conduct this work out of hours. Part of the difficulty of determining the number of teleworkers is that figures are based on self-report surveys rather than organisational records, which themselves make it difficult to calculate accurately because of the definitional issues of what actually constitutes teleworking (Harpaz, 2002). In 2005, the Office of National Statistics (ONS) estimated 3.1 million people in the UK worked from home of which 77% were teleworkers, that is, they worked at different locations using their home as a base (Ruiz and Walling, 2005). This number appears to be increasing each year (ONS), especially amongst those who need communication technologies to conduct their work away from the office. It is important to note that homeworkers use their home as a work base but very few individuals exclusively work from home (Hotopp, 2002), and indeed many work from multiple (or at least two) locations; referred to by Halford (2005) as "hybrid workspaces" (p. 22).

What emerges from the literature, and noted by Bailey and Kurland (2002), is that much of the teleworking research stems from a practitioner perspective especially with regard to information technology, transport, infrastructure and planning, with some insight from the sociological and organisational behaviour domains. Occupational

psychology has not fully embraced research into this new way of working, although in

2002 there was a special edition of the Journal of Organizational Behavior which was

devoted to the *Brave new workplace: Organizational Behavior in the Electronic Age*; as

well as the 2003 edition of New Technology, Work and Employment. This may be one

reason why the concept of teleworking remains in the realm of the practical rather than

theoretical. Another reason for the limited interest might be the lack of take up for

teleworking, which is nowhere near as prevalent as originally forecast (Baruch and

Yuen, 2000); reflected in the surge of research in the late 90s and early 2000s.

However, it is not yet a major organisational issue which occupational psychologists are

charged with investigating.

Teleworkers

The ONS calculate that over 60% of teleworkers are self-employed; and the

majority are male. This gender bias was highlighted by Bailey and Kurland (2002) who

found that despite assumptions about work-life balance and child care needs, women

were in the minority with regard to teleworking. Bailey and Kurland (2002) also found

that teleworking was most popular amongst couples without children. In relation to the

nature of the work conducted by teleworkers, there appears to be two camps: the

professionals or managers, and the clericals (Shamir and Salomon, 1985). The ONS

estimated that over 90% of UK teleworkers were in the first category of professional

and/or managerial staff including skilled and technical workers. These workers are

regarded by Jurik (1998) as having the flexibility to telework and the opportunity to

telework was often seen as a privilege (Felstead, Jewson, Phizacklea, and Walters,

2002). The clerical/administrative group, however, can be viewed as forced into

'slavery' because of organisational requirements to free up office space and indeed this

group may have inferior terms and conditions (Fairweather, 1999). Several researchers

have agreed with Bailey and Kurland's (2002) profile of a teleworker as someone who is older, male, and a mid-professional. The description provided by Felstead et al. (2002) that teleworkers are generally "male, highly educated, better paid on average and higher grade occupations" (p. 214) also fits the profile of workers with the most opportunity to work from where they wanted, including working from home.

Teleworking Motivations

The advent of teleworking was viewed as an opportunity to conduct work under new conditions in response to individual needs as well as organisation requirements (Baruch and Yuen, 2000). The major impetus was for employees to be freed from long commutes and regain better work life balance (Shamir and Soloman, 1985) whilst organisations could make building and infrastructure savings (Stanworth, 1998); and even the environment could benefit (Handy and Mokhtarian, 1996). Although, teleworking has not quite been the panacea of hope for future working that it was forecast to be (Nilles, 1975), the reasons for teleworking remain similar (Mann et al., 2000). Indeed these are not driven by technology advances per se, rather that these e-communication opportunities facilitate teleworking (Tung and Turban, 1996). More specific organisational reasons for telework include skills retention, increased productivity and better quality of life (European Telework Development group, 1994). For individuals, teleworking might provide them with a greater sense of autonomy and independence, demonstrating a manager's trust in a subordinate (Harpaz, 2002). Teleworking might also be considered and requested by individuals keen to manage their time, to balance their home/family life and expenses in a different way (Harpaz, 2002).

The Homeworking Intervention Programme

This intervention programme sought to implement homeworking practices

within a small team. The case presented here covers all major stages of an intervention from problem analysis, the mechanics of the solution implementation, and then the evaluation of the effectiveness of the programme; as well as a model of homeworking implementation. This approach was taken as there is no definitive method of delivering a teleworking/homeworking intervention programme although there are numerous teleworking implementation guides (e.g. Dwelly and Bennion, 2003; US Federal Govt guide to teleworking).

Problem Analysis

Context. The current intervention was conducted in response to a major organisational change programme undertaken by the UK Royal Air Force (RAF). In 2005, the RAF conducted a process organisation review the outcome of which was to collocate the two RAF Command HQs organisations, and to site these as one Air Command HQ at RAF High Wycombe, Buckinghamshire. The result of this meant that the HQ at RAF Innsworth, Gloucestershire would be made ready for disposal by the end of 2008. In terms of manpower, the staffs at the two HQs would merge and in accordance with employment contract regulations, mobile Civil Servant staff at RAF Innsworth would transfer to RAF High Wycombe as required. The psychology team introduced in Chapter 2 were located at the RAF Innsworth HQ, and as such were required to relocate to RAF High Wycombe.

Retention. The re-organisation described above did not jeopardise the job security of OPT staff and indeed their continued contribution to the RAF was guaranteed for the short to medium term. The plan was to transfer the seven team posts from RAF Innsworth to RAF High Wycombe by September 2006, however this was not welcomed by the team. As aforementioned in Chapter 2, the staff had strong place and social attachments (Inalhan and Finch, 2004; and Ronney, et al., 2010) within the

organisation, but also to the geographical location. Several members of staff had strong

family and community roots within the locale and were unwilling to relocate their lives,

even if their job was moving. This was particularly the case for the two most senior and

experienced members of staff. These individuals had decided not to relocate their home

to the south east, and so it appeared their only option was to leave their job. These

members of staff did not wish to resign and indeed wanted to continue to work within

OPT.

OPT's management faced the prospect of losing experienced psychology staff

who could be regarded as knowledge workers, described by Ramírez and Nembhard

(2004) as "high-level employees who apply theoretical and analytical knowledge,

acquired through formal education, to develop new products or services" (p. 604). As

OPT is small, individual members tend to have more of an impact as they contribute

high proportions of the output. This is no less the case for senior staff who held the vast

majority of the corporate knowledge as well as having the most practitioner experience

(Huy, 1999). The loss of continuity, corporate knowledge and competence during

organisational change could have jeopardised the ability of OPT to deliver supporting

research, and significantly would have had a negative impact in the short to medium

term on the ability of their directorate to deliver personnel strategy. Crucially, this

would have caused great difficulties for both OPT and the directorate who would be

seeking to prove their value, contribution and credibility within the new HQ. In

conclusion these individuals were key to delivering the OPT psychology service. It is

worth noting that whilst retention was the key organisational driver, like many

teleworking/homeworking implementation, the request for homeworking was initiated

by the staff rather than the management (Shin, Sheng and Higa, 2000).

Stage 1 - possible option. In terms of determining an appropriate intervention

for this organisational problem the requirement was clearly driven by the need to retain

staff, in order to maintain continuity and maintain output, despite the location issue. To

that end, it was agreed to consider a flexible solution to retaining these staff, the most

likely option being homeworking. However at this stage it was not clear if the potential

drawbacks of homeworking might outweigh this need; and indeed the benefits and

shortcomings of homeworking were largely unknown as they had not been determined

or articulated. Therefore a short review of the advantages and disadvantages of

homeworking, was conducted and presented in Table 5. It is clear from this review that

there are a range of benefits and drawbacks some of which might negate each other; but

it was clear that without this information at this stage feasibility of and suitability for

homeworking could not be accurately determined.

Stage 2 – feasibility, the suitability of the work. Once it was agreed that a

retention solution based on homeworking was worth pursuing, the next task was to

determine if homeworking arrangements were appropriate for the nature of the OPT

work and whether this work could be conducted remotely from the workplace. This

task was undertaken to ensure an objective assessment of the possibilities and the extent

to which the work could be conducted away from the office. This rigour was essential

to ensure that favouritism or personal regard was not a reason to permit homeworking

(Gajendran and Harrison, 2007). The OPT work tasks are presented at Table 6.

The listing of individual tasks demonstrated that the work of OPT was wide

ranging. The key characteristics of the work was that it was not routine or procedural; it

involved problem solving, often with others; the work was research orientated; the work

required an ability to work independently; conversely the work also required teamwork

and a team culture which fostered communication; the maintenance of robust client

links were important; and finally the work constantly required IT and phone

connectivity.

Table 5

Advantages and Disadvantages of Homeworking to Both the Individual and the

Organisation

Advantages of homeworking		Disadvantages of homeworking	
To the individual	*To the organisation*	*To the individual*	*To the organisation*
Autonomy and independence (Harpaz, 2002).	Increased productivity (Baruch and Nicholson, 1997).	Feeling of isolation (Cooper and Kurland, 2002).	Impact on the team (Duxbury and Neufeld, 1999).
Flexible working hours (Di Martino and Wirth, 1990).	Create positive image of the organisation (Harpaz, 2002).	No work/home separation (Harpaz, 2002).	Health and safety issues (Fairweather, 1999).
Improved time management; free from distractions (Wicks, 2002).	Lower absenteeism (Potter, 2003).	Self-discipline problems (Baruch, 2000).	Homeworking transition costs (Shin et al, 2000).
Reduction/elimination of transport time (Baruch and Nicholson, 1997).	Increased ability to retain best employees and attract new employees (Potter, 2003).	Lack of professional support e.g. secretaries, postal services etc (Harpaz, 2002).	Teleworking staff more difficult to supervise; supervisors dissatisfied (Kurland and Egan, 1999).
Cost savings related to work habits (e.g. travel, clothing and food) (Baruch and Nicholson, 1997).	Access to greater labour supply/wider recruitment pool (Di Martino and Wirth, 1990).	Career development. Reduction in chances of promotion (Kerrin and Hone, 2001).	Loss of organisational commitment and identification by staff.
Flexibility in the organization of work hours and leisure activities (Hill et al, 2003).	Increased feelings of belonging with the organization (Vitterso et al., 2003).	Expectations that staff are available out of hours (Di Martino and Wirth, 1990).	Investment in time, effort and training to change to new ways of working (Harpaz, 2002).
Increase in Productivity (Baruch and Nicholson, 1997).	Decrease in office costs; reduces office overcrowding (Apgar, 1998).	Possible reduction of intra-organizational communication (Duxbury and Neufeld, 1999).	Greater absence of best employees from the office.
Better work life balance (Hill et al., 2003).	Increased organizational flexibility (Peters et al., 2003).	Tendencies to overwork (Sullivan and Lewis, 2001).	Increased data security concerns (Karnowski and White, 2002).
	Better usage of information systems (Tung and Turban, 1996).		Negative impact on office workers who do not telework (Golden, 2007).
	Increase in loyalty (Ilozor et al., 2001).		

Table 6

OPT Work Tasks and Whether They Can Be Conducted Remotely

Task	Description	Conduct remotely?
Client engagement	Meeting with sponsor of work to determine what organisational issue is to be investigated.	Initial contact may be remote (by phone or email) but at least one meeting must be face to face.
Research: Methodology design	As a result of client engagement and tasking, design of appropriate data collection method.	Can be conducted remotely with provision of appropriate IT. Communication with team members and client important but can be conducted remotely.
Research: Data collection	Questionnaire, interview or focus group, as well as external scanning data collection	Face to face data collection may be conducted at locations away from office – so ability to travel is important. Questionnaire data collection can be conducted remotely, as can external scanning.
Research: Analysis & interpretation	Analysis and interpretation of data.	Can be conducted remotely with provision of appropriate IT e.g. SPSS.
Research: Report writing	Production of draft and final reports/papers/presentations for the client.	Can be conducted remotely with provision of appropriate IT. Communication with team members and client important but can be conducted remotely.
Advice & consultancy	On the spot, one off, short term provision of advice on range of subjects. Additional analysis of data and production of recommendations. Use of team as a 'sounding board' for ideas.	Can be conducted remotely with provision of IT & e-communications. However, some advice is initiated by office visits. This would require the team to defer to the homeworker or deal with it themselves.
Meetings & liaison	Attendance at meetings and act as point of contact and liaison.	Face to face attendance required, but may be at different locations not just the office.

This suitability review emphasised that whilst the work did require client and team interaction and support, it also required independent study and protracted periods of concentration. OPT staff had substantial control over their workload and priorities, and day-to-day supervision was not necessary either from inside the team or from senior management. Tasking was often requested by email, and short notice tasks very rarely required immediate face to face representation. The team often found itself working from different sites, and being able function as a team apart from one another was a familiar and regular occurrence; and so it was common practice for team members to

keep each other abreast of key developments and to share information. The conclusion

of this stage was that many of the psychology tasks could be conducted and achieved

remotely but relied on connectivity technology, the classic requirement of

teleworking/homeworking (Tung and Turban, 1996). It was also concluded that,

crucially, any homeworking must be supplemented with face to face communications

and meetings. Even at this early stage, a hybrid option was emerging as necessary

(Halford, 2005).

Stage 3 – necessary conditions. After it was confirmed that the psychology

tasks could be achieved away from the office (supplemented with office time), it was

necessary to determine which conditions should be in place for these tasks to be

successfully conducted remotely; and if the members of staff who had requested

homeworking were suitable candidates. Baruch and Nicolson (1997) proposed four

conditions necessary to successfully implement homeworking. These were: *the job*

(nature of the work and how this was facilitated by IT); *the organisation* (whether the

organisational culture supported homeworking); *the individual* (whether the worker in

question had suitable attributes to work from home), and *the home/work interface* (how

work could be successfully achieved at home). The intervention programme review

also flagged one additional condition, team; and an expansion of the organisation

condition, featured in the additional literature and pertinent to this implementation. The

fifth aspect, *the team*, relates to having a team which supports and trusts the

homeworker. Finally, additional organisational condition aspects were identified

including adherence to organisational regulations; in this case, health and safety,

security and obtaining financial approval. Figure 3 presents the necessary conditions

for successful homeworking as outlined above.

HOMEWORKING CONDITIONS				
The job (Baruch & Nicolson, 1997).	**The organisation** (Baruch & Nicolson, 1997).	**The individual** (Baruch & Nicolson, 1997).	**Homework interface** (Baruch & Nicolson, 1997).	**The team**
Achievable outside the office (Katz, 1987). Controlling pace of work (Doe, 2000). Limited need to meet face to face (Katz, 1987).	Management & technical support (Yap & Tng, 1990). Management trust (Lim & Teo, 2000). Culture allows homeworking to thrive (Apgar, 1998). Adherence to H&S, security regulations (Fairweather, 1999). Financial approval (Tung & Turban, 1996).	Personal attributes & circumstances such as: Personal motivation Being emotionally intelligent Tackling isolation Looking after self Being disciplined Adapting work style (Tietze & Musson, 2005).	Work/life balance, negotiating life/ family (Shamir & Salomon, 1985). Enabling technology & connectivity (Duxbury & Neufeld, 1999). Available space / containing work Hill et al (1998).	Open & regular communication (Duxbury & Neufeld, 1999). Continued teamwork & support (Golden, 2007). Perceived equity (Golden, 2007).

Figure 3: **Necessary Conditions for Successful Homeworking.** The figure presents five necessary conditions for implementing homeworking practices; adapted from Baruch and Nicolson (1997).

Both line management and psychology staff were confident the necessary conditions were in place, although some of these, namely the adherence to organisation regulations, such as health and safety, and the supporting technology were only available in theory as these conditions had not yet been tested. Furthermore, whilst line management had approved in principle for homeworking, financial approval had not yet been sought or secured.

In terms of individual suitability for homeworking, a list of personal attributes and circumstances were drawn up; these are presented in Table 7.

Table 7

Determining Suitability for Homeworking

Personal attributes	Personal circumstances
Motivation e.g. to succeed, to have work/life balance, professional pride and commitment (Baruch and Yuen, 2000).	Negotiating life and family do not distract (Tietze and Musson, 2003).
Emotional intelligence i.e. being aware and have the ability to control of own feeling such as feeling guilty, over working, reacting to pressure (Mann et al., 2000).	Containing work, separation between work and home life (Tietze and Musson, 2005).
Dealing with isolation and feeling lonely (Baruch and Yuen, 2000).	Adapting work style with structured time management and being output not time driven (Apgar, 1998).
Look after psychological and physical health (Mann and Holdsworth, 2003).	
Be disciplined and manage self (Shamir and Salomon, 1985).	
Confidence with IT/remote equipment (Tung and Turban, 1996).	
Good communication skills, particularly communicating remotely (Katz, 1987).	

Suitability for homeworking was assessed both by the individuals in question and their line managers. It was regarded as important that the individuals involved conducted a self-assessment of their perceived suitability. Individual suitability should be evaluated in terms of both personal attributes and personal circumstances. The former includes motivation (Baruch and Yuen, 2000); emotional intelligence (Mann et al., 2000); ability to deal with isolation (Baruch and Yuen, 2000); psychological and physical health (Mann and Holdsworth, 2003); confidence in using and utilising IT/remote equipment (Tung and Turban, 1996); good communication skills (particularly communicating remotely) (Katz, 1987); as well as being self-disciplined (Shamir and Salomon, 1985). Personal circumstances relate to the ability to negotiate the work and home environments (Tietze and Musson, 2003), and ensuring the there remains a

distinction between the two (Tietze and Musson, 2005); as well as being able to adapt to

the new ways of working and the challenges this might bring (Apgar, 1998).

The criteria were used as a checklist for determining the suitability of staff for

homeworking; however it was important that these were not the only factors used for

selection and that a non-discriminatory policy was adhered to (Hartstein and Schulman,

1996). It is likely that there is no one type of personality or set of personal attributes

that makes one person a better candidate for homeworking then another. Research has

shown that homeworkers who adapt to the new working practice by understanding the

pitfalls are more likely to succeed, and, as described by Doe (2006) "meet the challenge,

achieve the potential" (p. 6). In fact, it is the nature of the job, not the individual that

best determines whether homeworking is viable (Peters et al., 2003); that is, whether the

job is achievable away from the office.

Stage 4 – business case. The business case stage of the intervention involved

two elements: determining how to organise a formal homeworking set up, and then

producing a sound business case to secure financial and organisational approval. This

phase of the intervention drew heavily on how the MOD operated its formal

home/mobile enabled system for those staff who wished to work at home or from

different locations. During investigations it was clear that homeworking was not a new

working practice within the MOD, but it was implemented on an ad hoc basis according

to local needs, and this was not dissimilar to previous research findings (Shin et al.,

2000). Using the MOD system as the framework for the homeworking implementation

meant that the organisational regulations were adhered to; such as distinct personnel

regulations on what homeworking constituted, when it is appropriate to instigate, as

well as how best to achieve it. The main organisational regulations for homeworking

related to security, health and safety, IT equipment and communications requirements,

and working hours. The MOD homeworking system simplified the procurement aspects and provided connectivity and IT support. Whilst the essence of homeworking is to be able to work away form the office (e.g. Wilks and Billsberry, 2007), the provision of equipment to facilitate this remote working is critical. The MOD homeworker service included: furniture for the home office; a secure laptop; printer; remote access with connection via Broadband; and a mobile phone option. As part of the implementation, set up costs were determined and financial approval was sought and granted. Whilst this intervention programme did determine implementation and running costs of homeworking these were not offset against the cost of replacing the two members of staff. This was partly because the cost of implementation seemed much lower than replacement costs. Significantly, for line management, cost and value were regarded as different concepts and the intention to retain experienced staff was related to their value irrespective of the cost.

Solution Implementation

Stage 5 – ordering, delivery and set up. The roll out of homeworking had a relatively short time frame and was bound by contractor performance indicators. Once the equipment was ordered, it was delivered as scheduled, and training for the system was organised.

Stage 6 – new ways of working. A crucial stage of the intervention programme was the development of new ways of working. Despite substantial consideration of the necessary conditions required for homeworking, the potential advantages, disadvantages and potential impact, the reality needed to be tested and worked through (Apgar, 1998). Like many new systems, even the best plans cannot prepare for every eventuality or challenge. The homeworking was in one way even more challenging because it was against the backdrop of a major organisational change and relocation. The first member

of OPT to take up homeworking also had to deal with her team relocating en masse to another location. Therefore the development of this new way of working was dealt with in three interwoven strands: the mechanics of working away from the office, the team issues and line management.

Working away from the office. The reality of the homeworking set up was that the member of staff actually worked from home on three days and visited the office twice a week. This working pattern was typical although there was some flexibility on days visited or the number of visits. The office days were for approximately six to seven hours long because of the four hour round trip to visit the site at RAF High Wycombe. The arrangement constituted that of a hybrid approach (Halford, 2005) because the homeworkers regularly visited the office and had a dedicated workspace there.

With regard to the mechanics of homeworking, this took place in a private room dedicated to work, with connectivity to the email system and shared IT network. Phone communications were made via a mobile. Each homeworker worked a standard day of approximately eight hours (during normal office hours), although on occasion they worked for extended periods of time, or during 'out of office' times. However, for all intents and purposes the homeworkers operated at home in a similar fashion to their time spent in the office. What did differ was how the homeworkers used their time at each location. Home office time was used primarily for work which could be achieved independently and required periods of concentration. The office time, conversely, was spent in meetings, 'catching up' with colleagues and conducting tasks difficult to achieve out of the office. Unsurprisingly, the office time was characterised by social interaction.

The team. The psychology team, of which the homeworkers were part, also had

to develop new ways of working which in this case were compounded by the

organisational change of relocation to another site. The team had been used to being

located together but now had to adapt to being a virtual team for some of the working

week. The team ensured that 'office time' was booked with the homeworkers so that

face to face time could be dedicated to discussing work, brainstorming, having

meetings, and clarifying tasks. Often the office time was primed with a phone call,

email or diary booking to set the tone and outline issues so that the face to face time was

well spent. Communication was via a mixture of phone calls, emails and face to face.

No team ground rules were set but most phone calls appeared to be between the

homeworker and staff members or line managers (i.e. subordinates and superiors); and

then via email with the rest of the team (i.e. colleagues). Initially, phone calls were

made for a given purpose such as discussing a piece of work or clarifying a task; but

later these were often more social and a good opportunity for checking an individual's

well-being and for having a social exchange.

Line management. There were three different line managers throughout the

implementation period. Two line managers inherited the decision to permit

homeworking; and although neither objected to this agreement, one admitted to being

initially unconvinced of its merits; although he became more positive once he saw how

it operated in practice. Communications between the line manager and each

homeworker were by both phone and email, however the latter was used much more

frequently, especially for tasking. Office time was used for 'catch up', briefing and

general 'how goes it'. Phone calls initially tended to have a work related purpose but

once the homeworker and line manager developed a rapport, phone calls were often of a

more social and supportive nature.

Evaluation

Stage 7 – evaluation and effectiveness. Any implementation programme

should include some form of evaluation. The homeworking evaluation was conducted

by monitoring the implementation on an ongoing basis and any subsequent adjustment

to behaviour or arrangements required to compensate for initial difficulties. These

issues were kept as a log so that the relevant data could be used as evidence when

raising issues with line management or other individuals. Appendix C presents a

sample of this log with regard to the early stages of implementation. In terms of output

and performance, line managers regularly reviewed the homeworking process and

provided formal feedback (performance reviews) which was regarded as more

appropriate than self rated assessment alone (e.g. O'Neill, Hambley, Greidanus,

MacDonnell and Kline, 2009); although informal feedback from the homeworkers and

the rest of the office based team was also sought. Significantly, an assessment of the

effectiveness of homeworking was also conducted in terms of OPT's output and

whether this was maintained as a consequence of key staff members being retained in

post. This evaluation took the form of team meetings (identifying whether key work

was undertaken) and project reviews completed by stakeholders (determination of the

quality, timeliness and relevance of the output). The evaluation included set up issues,

adjustment, positive and negative outcomes, management and colleague support,

delivery of OPT's output and later evaluation.

Set up issues. With regard to the setting up of homeworking, whilst this was

supported by an organisational system and set of procedures, these focused heavily on

justification, financial and facilities authorisation. However, the reality of identifying

the appropriate IT and finance specialists to provide approval and authority was far

from straightforward (see Appendix C). It was clear that the terminology used in the

procedures was not widely understood; and organisational and private agendas

regarding homeworking came to bear in some instances. Without appropriate cultural

support for alternative ways of working such as homeworking, even with legislative or

organisational backing in place, it can be very difficult to find support and assistance to

put the intention into action (Apgar, 1998). In this case the organisation had systems in

place but the culture was in places unsupportive (Grover and Crooker, 1995). The

current organisational procedures gave limited credence to the individual and

organisational needs and even less consideration to the circumstances of the proposed

homeworker. A voluntary questionnaire regarding working preferences for the line

manager and staff member was available, this did not, however, delve deeply enough

into the different conditions required for homeworking or the importance of

understanding the work fit (Peters et al., 2003).

There remains a deficiency in the generic personnel policy for homeworking

which does not adequately address the unique circumstances of *each* homeworker, and

specifically that these are dynamic. This reflects the difficulty for an organisation to

adhere to standard and fair procedures and meet the specific needs of the individual and

their circumstances (including work and line manager needs). As a result of this

evaluation, the issue was highlighted to the organisation's human resources department

and it is hoped to hold workshops to understand the unique circumstances of

homeworking (still in its infancy in the MOD) and devise appropriate solutions.

With regard to specific set up issues, once approval had been given the ordering

process was not as straightforward as anticipated and relied on knowledge of IT beyond

that of most members of staff. Finding individuals who could help with the process also

took longer than expected, and as such slowed down the whole set up process. This is

one aspect of homeworking which is rarely reported. Much research focuses on the

advantages and disadvantages (e.g. Tung and Turban, 1996), suitability (e.g. Peters et

al., 2003) or evaluation (Katz, 1987) of teleworking and homeworking in practice.

Research often does not highlight the difficulties of implementation, for instance, whilst

suitable conditions might be in place, equipment, connectivity or organisational 'red-

tape' may be major obstacles (Tung and Turban, 1996). This homeworking set up was

not a straightforward process. Despite policy, rules and guidance the actual process

took over one year (again another deficiency of the policy guidelines). It was clear that

perseverance as identified by Shin et al. (2000), as well as trying different tactics to

identify the necessary procedures and individuals required at the different stages was

necessary. In addition, the initial IT connectivity (first six months) was variable causing

communication and output problems but these were resolved after a software upgrade

and better laptop 'housekeeping'.

Adjustment. There was no doubt that it took time to adjust to homeworking

(Katz, 1987) for the homeworkers, non-homeworkers in the team and line management.

Self discipline and motivation were vital; confirming the importance of these

characteristics as determined during the scoping phase (Katz, 1987). Organisation,

planning and good time management skills were shown to be important coping

strategies also reflecting research findings (Duxbury and Neufeld, 1999); and this

included scheduling in face to face meetings so that office time was optimally used.

The adoption of separate home and work streams and allocation of specific tasks to each

was particularly useful, especially as a hybrid approach was adopted (Halford, 2005)

where the homeworkers spent part of the working week in the office and part of it at

home. The homeworkers also adjusted their work flow and tasks to fit with their time at

home and their time in the office, labelled respectively by Duxbury and Neufeld (1999)

as "independent work" and "interactive responsibilities" (p. 10). The homeworkers

'home time' remained relatively structured ensuring they were available during normal

office hours; however being at home also afforded them more flexibility in a simailr

way to that reported in Tietze and Musson's (2005) research, where workers' days could

be structured according to work tasks and also home life demands.

   Positive outcomes. For OPT, the homeworking arrangements facilitated the

retention of key staff that would have otherwise opted to leave the department (Lim and

Teo, 2000). This retention benefited the individuals themselves by allowing them to

stay in their jobs but also to live at their preferred location. This in turn maintained the

job satisfaction of the homeworkers (Baruch and Yuen, 2000), often higher amongst

teleworkers (Morganson, Major, Oborn, Verive, and Heelan, 2010); and indeed their

organisational commitment (Hunton and Norman, 2010). Output of the homeworkers

increased particularly because they experienced fewer distractions when they were away

from the office (Katz, 1987) and could focus on producing and delivering key outputs

such as research reports. Certainly these conditions facilitated the homeworkers to

complete a number of short timeframe tasks.

   With regard to the office based team, junior staff were required, but also allowed

the space, to gain confidence and competence as they became empowered to deal with

queries and provide advice in lieu of their absent colleagues. With regard to work

requests, most of these were made via email and not from 'drop in' queries and so it

made little difference as to the location of the staff member in question.

Communication between team members became more structured and more regular, for

instance with monthly work programme updates. These meetings capitalised on the

office visits of the homeworkers and included all line managers. Communication

improvements also included better record keeping and updating of documents such as

work plans and diaries. Much of the electronic communication was facilitated by access

to each others' work on a shared computer network. After a while verbal

communication was not just work related but time was set aside for chatting and social

support both on the phone and in the office; something not always reported by

homeworkers especially if they feel guilty 'socialising' during work time (Mann and

Holdsworth, 2003).

Negative outcomes. The sense of isolation that many homeworkers can

experience (Shamir and Salomon, 1985) did not appear to affect the team's

homeworkers, and this may well be because of their regular office visits (Mann et al.,

2000) and frequent communication with their office colleagues. However, there was

some sense of missing out on general team interplay or information, especially small

pieces of information passed around on an office grapevine (Cooper and Kurland, 2002)

and feeling out of the loop (Gajendran and Harrison, 2007) which could develop into

professional isolation (Golden, Veiga and Dino, 2008). Whilst trust amongst team

members was relatively high, the homeworkers felt they had to prove themselves to

their team and also to their line management. This was entirely self-driven but

nevertheless was a negative outcome which is often reflected in the teleworking

research (e.g. Halford, 2005).

The office visits were clearly a valuable aspect of the homeworking

implementation although output on office days tended to be related to face to face

interaction rather than concrete and tangible deliverables. This did not diminish the

importance of this face time but required a different mind set for the team and the line

manager, where office days might be more focused on face to face and verbal

interaction than production of tangible output. The office days were also marred in part

by the long commute. A final negative outcome was the sense of additional and

continual effort expended to 'make homeworking successful' and this included

continual reinforcement of working relationships (Apgar, 1998). This was perhaps not surprising given that much teamwork is still related to face to face interaction and a reduction in this can decrease the quality of relationships (Golden, 2007).

Management and colleague support. One variable which can greatly affect the outcome of homeworking is management and colleague support. In this intervention programme, most of the team had worked together before in the office so already had a sense of 'team spirit', were very familiar with each other's working style and had developed rapport and trust. This supported continued colleague interaction and teamwork. However, some of the smaller interactions that take place in office environments such as banter (Mann and Holdsworth, 2003) or informal learning (Cooper and Kurland, 2002) as well as friendship, have undoubtedly been affected by homeworking (Yap and Tng, 1990). Crucially, homeworkers found it more difficult to identify early signs of issues or concerns of staff and colleagues because they were unable to 'pick up' on these signs, many of which could only be recognised when in face to face situations (Tung and Turban, 1996). On the positive side team support was available during office visits each week.

Delivery of OPT's output. Significantly, the implementation of the homeworking intervention was initiated in order to retain key team members with the intent to ensure the continuous delivery of OPT's services and output. The objective of retaining key staff members was fulfilled. Furthermore, service was maintained in spite of having two senior team members absent from the office for part of the week. If the team's performance had declined this might have been caused in part by the homeworking implementation and also issues related to relocation. However, despite these major organisational and team changes, OPT managed to maintain its output, develop its services and gain a positive reputation within their new location. As

highlighted in Chapter 2, the positive feedback, plaudits and awards, and significantly a

clear demonstration of their contribution to RAF personnel and training strategy and

policy is a good indication of OPT's success. This positive picture does mask the fact

that homeworking has placed strain on the team but the difficulties attributed to

homeworking, or more accurately from having a dispersed team, have been tackled and

overcome.

Later evaluation. Whilst the original homeworking evaluation was positive,

certain circumstances occurred later which demonstrated the need for constant

monitoring of the effect of homeworking. After 18 months of operating as a

geographically dispersed team, OPT appeared to be working well and it was 'business

as usual'. However, it became apparent that communication was not as effective as

assumed, in particular there was evidence that team members were keeping information

or concerns to themselves which caused difficulty in delivering output. Assumptions

that the team set up was working may have lead to complacency within the team

especially between line managers and staff, assuming that communications were up-to-

date, honest and appropriate. Some of these issues may have been prevented if the

entire team was office based as it is more difficult to conceal problems from each other

(Mann et al., 2000). Furthermore, feelings of professional isolation were emerging

(Golden et al., 2008) and a sense of not fitting in, for instance the two homeworkers

were required to share a single desk during office days. This is an issue recently

researched by Bosch-Sijtsema, Ruohomaki and Vartiainen (2010) with regard to

working in multiple locations and the negative impact of coming into an established

office environment. It was concluded that the entire team must be aware of changes to

situations and continually monitor communications processes. It was clear that keeping

in contact with one another was not in itself a sufficient condition for producing quality

interaction or dealing with necessary issues (Tan-Solano and Kleiner, 2003).

Discussion and Model for Future Implementation

In this chapter I have described an organisational intervention programme which sought to implement homeworking practices. This homeworking intervention involved the psychologists who were introduced in Chapter 2 and was initiated by the need to retain key members of this team. The retention of these psychologists was crucial to the delivery of OPT's service of 'informing decisions to influence change' because of the corporate knowledge, experience and research continuity these individuals offered. Given the strategic direction undertaken by the organisation to reorganise OPT and optimise its delivery, losing key team members would have seriously jeopardised this course of action. This intervention therefore had an organisational focus but was actually driven by the individual team members. This is not uncommon, where staff rather than managers initiate homeworking proceedings in a 'bottom up' approach (Shin et al., 2000). It is fair to state that whilst management were supportive of homeworking at every stage, the individual 'benefactors' were responsible for organising many aspects of homeworking and for drawing attention to any team dilemmas. By way of interpretation, observations made during the intervention process and evaluation are compared with previous research and includes a model for successful homeworking implementation.

Model of Successful Homeworking Implementation

Successful homeworking implementation requires a number of conditions to be in place. It also requires careful planning, organisational support and access to key resources. For formal, rather than occasional, homeworking implementation the decision should not be taken lightly. The process to set up can be lengthy and even after implementation the new style of working requires continual monitoring because of the

unique but not insurmountable challenges homeworking can create. Figure 4

summarises a proposed model of a hybrid homeworking implementation derived from

previous research and the current intervention programme.

INITIATION	ORGANISATION	SET UP	MONITORING
Individual request or manager suggestion	Securing approval	Hybrid working (different locations)	Review
Organisational need	Securing finance	Home & Work stream	Work life balance
Conditions: (Job; Organisation; Individual; Home/work interface; Team)	Access to necessary equipment	Boundaries	Evaluation Regular review
Suitability		Social support & informal communication	Readjustment
Selection			
Considerations Advantages	**Considerations** Potential long lead time	**Considerations** Adjustment for the homeworker, the team & managers	**Considerations** Avoid assumptions
Disadvantages Impact			Continued appropriateness of homeworking for the individual, team & organisation

Figure 4: **Hybrid Homeworking Implementation Model.** The model outlines the key requirements and issues which should be sequentially taken into account when considering a hybrid homeworking implementation.

Key aspects of the model will be discussed below but it is important to note that

this model adopts a hybrid solution (Halford, 2005) and therefore it is not a singular

homeworking stream but a complementary arrangement of working and output from

both office and home bases (and other locations as appropriate).

Initiation. The first phase of the model is aptly named 'initiation' but includes

the vital planning stages of implementation. As Shin et al. (2000) stated much

homeworking is initiated by individuals rather than managers and is often of an ad hoc

nature. Here is recognised that employees may request homeworking but also that

managers might suggest it for both organisational (reduce estate costs e.g. Di Martino

and Wirth, 1990) and individual reasons (for instance, recruitment and retention, e.g.

Halford and Leonard, 2006). A note of caution is worthy here, as estate costs will not

be completely saved in a hybrid model as some form of office space is still required. It

is further argued that successful implementation is more likely if an organisational need

can be demonstrated (Shin et al., 2000), and this may address some of the cultural issues

regarding how homeworking might be perceived and supported (Karnowski and White,

2002). However, the type of cultural change that might be required to better facilitate

homeworking such as educating middle managers about the benefits of alternative

working arrangements including homeworking (Apgar, 1998) and addressing their

concerns, is beyond the scope of this homeworking implementation model.

The conditions necessary to implement homeworking are intended to be all

encompassing, recognising the different facets of homeworking, and include the

consideration of home work interface (e.g. Baruch and Nicolson, 1997); the job (e.g.

Katz, 1987); the individual (e.g. Tietze and Mussen, 2005); the organisation (e.g. Apgar,

1998); the team (e.g. Duxbury and Neufeld, 1999); and organisational regulations (e.g.

Fairweather, 1999). The understanding of each of these conditions will allow an

objective determination of the suitability of both an individual and their job for

homeworking, but importantly ensures that other factors are considered such as the

impact on the team, availability of resources and organisational needs. During this

phase substantial advantages and disadvantages of homeworking should be ascertained

as well as the potential impact of implementation.

Organisation. The second phase of the implementation model is called

'organisation' and involves the approval for homeworking as well as securing finance

and equipment required to facilitate homeworking. These mechanics whilst mundane

are vital for the implementation. This model relates to formal implementation and

therefore it is important to secure access to the appropriate IT and phone equipment in

order to work successfully at a remote location, but crucially to be able to communicate

with those who remain office based (Harpaz, 2002). A possible consideration during

this phase is the potentially long lead times that may be experienced particularly in

organisations which do not have a clear homeworking implementation procedure, or

where a system is in place but individuals within the organisation do not actively

support the system.

Set up. The third phase of the model is called 'set up' and relates to the initial

set up of equipment but also to the first few months of adjustment to the new way of

working. This model is predicated on the premise that successful homeworking

requires the adoption of a hybrid approach with a combination of home and office based

working as Halford (2005) describes it as "where individuals are relocated *and*

dislocated *and* continue to participate in more traditional organisational spaces"

(Halford, p. 22) [italics in original text]. This requires the homeworker to adjust to

different modes of working when at home and when in the office; for instance as

Halford (2005) stated "the home stream was characterised as more routine, for instance

coding and document preparation or completion of the long and complex self-evaluation

documents required for regular meetings with line managers" (p. 25).

Halford's work has demonstrated the complexity of remote working set up, and

highlighted that where work takes place has a significant impact on how it is conducted

and what is conducted. Understanding this concept and being prepared to adjust

working styles is crucial. It appears that homeworking scenarios require bespoke

solutions because given that every homeworkers 'home' is different, the set up needs to

treat each case as unique. Clearly there will be many similarities between each set up,

but at the same time there will be circumstances particular to the individual and their

environment.

It may also be important to discern the 'tipping point' that ascertains the

optimum combination of home and office based working. Ideally, this tipping point

should be a negotiation between the homeworker and line manager as to what works

best for both the individual and the negotiation, but it likely to require some period of

time before the optimum combination is determined. This arguably may be change over

time and for particular work commitments. It also may be different for the individual,

the line manager, the team and the organisation. For instance, in order to reduce the

need to commute and to avoid office distractions, the homeworker may prefer only to

visit the office once a week; whilst their team may want them to attend the office

several times a week; especially when working on joint projects. The line manager may

be more flexible, depending on work requirements, however may request short notice

attendance or attendance not previous planned for.

Finally, whilst individuals may have a preference, the organisation may have

strict guidelines for attendance, dependent on the culture or available resources (such as,

desk space or cost of travel). It is feasible that if the tipping point changes over time

(for instance, if a new line manager takes up post, or desk space is only available at

certain times) then this could lead to the homeworker re-evaluating their position and

seeking an alternative solution (for example, another job). Furthermore, the setting up

of ground rules with line management and colleagues is required. This might cover

setting boundaries for working hours to avoid unnecessary working out of hours or spill

over into home life (Haddon and Brynin, 2005); but could also cover justice concerns

over control and power where the homeworkers may feel they have lost status because

they are absent from the workplace (Kurland and Egan, 1999). Boundaries are also

important so that individuals do not feel under surveillance (Fairweather, 1999) or even

as Apgar (1998) described it on "an electronic leash" (p. 136). Interestingly, this leash

may be self imposed as homeworkers feel the need to constantly prove that they are

contactable (and by association working) (Towers, Duxbury, Higgins and Thomas,

2006). These ground rules also ensure that misunderstandings or false impressions do

not occur.

It is important to formalise social support to ensure informal communications

(Golden, 2006) because the typical casual exchange experienced in an office

environment will be absent when working from home (e.g. Fritz, Narasimhan and Rhee,

1998). Homeworkers can feel a lack of support from others (Mann et al., 2000) but this

might be because remote communications without the nuances of face to face

communication can be impersonal and feel less supportive (Duxbury and Neufeld,

1999). This can also be compounded if homeworkers feel socially isolated (Shamir and

Salomon, 1985). Support can take the form of collaboration (Yap and Tng, 1990) or

communication (Duxbury and Neufeld, 1999).

An area which has been neglected by much of the homeworking research is

ensuring the well-being of the office based workers and making sure that their needs are

not neglected (Golden, 2007). Golden (2007) suggested that office based workers' job

satisfaction is unlikely to be enhanced by the occurrence of homeworking; and it is

possible that it could even breed resentment (Kurland and Bailey, 1999; Katz, 1987). It

is crucial to recognise the importance that social interaction has on both social and

professional networks and teamwork; what Hallowell (1999) described as the "human

moment" (p. 59). It should therefore not be assumed that even good working

relationships are not subject to fluctuations where trust and communication problems

might arise; just as they would if staff were office based (Donovan, Drasgow and

Probst, 2000). Furthermore for successful social support to be fostered, before

embarking on homeworking for protracted periods of time, it is recommended that

individuals should be office based first for a period of time in order to build solid

working relationships which will hopefully endure remotely.

Monitoring. The final phase of the model is called 'monitoring' and deals with

initial and long term evaluation and the subsequent adjustments made to behaviour and

practices as a result of these reviews. Review should cover performance and output

(Fairweather, 1999), communication (Yap and Tng, 1990), work life balance (Shamir

and Salomon, 1985) and employee well-being (Mann et al., 2000). As with any

intervention, it is likely to take time for the implementation to 'bed down' but it is

important not to assume that initially positive outcomes will continue and therefore

homeworking practices and management must be continually monitored and maintained

(Smith, 2008).

Communication channels must be reinvigorated and negative reactions

countered as soon as possible. It is also important to ensure that the effects of

homeworking are not viewed just from the perspective of the homeworkers themselves

but also those of co-workers (Golden, 2007). Close attention should be paid to the work

life balance and well-being issues. Apgar (1998) suggested that it is vital that both

manager and homeworker are honest when addressing work life balance concerns.

Indeed more recent research has shown that homeworkers do significantly more work

per week that their non-homeworking colleagues (Schweitzer and Duxbury, 2006).

Homeworkers can feel guilty for using their home time flexibly (Mann and Holdsworth,

2003) or have personal issues related to homeworking such as negative reactions from

partners (Vitterso, Akselsen, Evjemo, Julsrud, Yttri and Bergvik, 2003). Therefore it is

recommended that the work life balance is part of a regular review between the

homeworker and line manager; however this must not impinge on the privacy of the

individual but be related to their well-being at work (Handy and Mokhtarian, 1996).

Adjustments may be required as a result of these reviews and the homeworker,

the team and the line manager should be prepared for these (Raghuran, Garud,

Wiesenfield, and Gupta, 2001; and Klein, Becker and Meyer, 2009). Consideration

should be given to how performance and development is reviewed, and whether

homeworking might be a factor in assessment or whether it has little impact on the

process. If, for instance, an individual is judged on output primarily, then where that

work conducted is probably irrelevant, and it may also be quite straightforward for a

manager to evaluate this performance. That said, most workers are also assessed on

teamwork and relationships, including their own management of subordinates, and so

the nature of performance monitoring may need to be reviewed. For instance, face to

face interaction can still be observed by the line manager, but also remote

communication may need to be monitored or discussed; and in both cases the impact of

remote working on co-workers needs to be observed, including how the homeworker

moderates their interactions appropriately.

Clearly, homeworking should not disadvantage an individual nor should it be

highlighted in performance reviews when it is irrelevant. It is likely that both manager

and employee will have to negotiate and experiment with the best approach, and

expectation management will be important for both parties. Finally, it is important to

consider the appropriateness of the continued operation of homeworking for the

individual, the team and the organisation; but crucially throughout the evaluation each

party must avoid assumptions about what works and does not work for the effectiveness

of homeworking.

Contribution to Knowledge and Practice

This study contributes to both occupational psychology knowledge and practice. My findings support several conclusions from homeworking and teleworking research such as the time it takes to adjust to homeworking (Katz, 1987), positive outcomes of homeworking including retention (Lim and Teo, 2000), organisational commitment (Hunton and Norman, 2010) and that time for social support during work hours is important (Mann and Holdsworth, 2003). Significantly, this intervention programme supported the empirical work into hybrid working by Halford (2005) which was proposed in the planning stages of the intervention, and in practice it was concluded to be the most appropriate style. However, this implementation also showed, through conducting later evaluation, that there were signs of difficulties with working out of multiple locations (Bosch-Sijtsema et al., 2010). The evaluation and monitoring of the intervention also provided support for Golden's work (2007) highlighting the limited research on colleagues who remain office based. Significantly, this intervention has taken an occupational psychology perspective on homeworking by looking holistically at implementation, that is, it did not focus on a homeworking single issue but considered a raft of issues, problems and outcomes associated with homeworking implementation. There remains only a limited amount of research on homeworking (albeit more on wider teleworking practices) especially within the UK. This is perhaps because homeworking has not taken off in the manner it was forecast by researchers such as Nilles (1982) and indeed a UK Department of Transport survey suggested that more than 8 out of 10 full time employees felt it would not be possible for them to work at home (DfT, 2005). Consequently, homeworking has failed to be a major issue of investigation for occupational psychology. However, given the investment in time, planning, resources that needs to be and should be invested in homeworking, as

evidenced by this intervention programme, occupational psychologists can certainty

assist the process through both the advancement of knowledge and subsequently

delivery of practical solutions.

In relation to practical contribution, this intervention has been a longitudinal

study of homeworking from conception to ongoing evaluation. Therefore the lessons

identified from this intervention and the pitfalls encountered can be utilised by fellow

practitioners embarking on similar ventures; especially as so few studies provide this

level of detail. This study has also demonstrated six key conditions necessary when

considering and implementing homeworking (and they would apply to other remote

forms of working). These conditions are based on Baruch and Nicolson's (1997) work

and were expanded to encompass the issues encountered during planning and set up,

such as organisational regulations, team issues, hybrid working and ongoing

monitoring. The proposed model of hybrid homeworking implementation can act as a

set of guidelines and checklist for practitioners. Finally, this intervention has

contributed to applied knowledge and practice by highlighting the inevitable need for

bespoke solutions, which bring with it the tandem difficulties of implementing these

fairly and equitably.

Conclusions

I undertook this intervention programme to address a retention issue and

approached it in a systematic and objective manner. Whilst this might seem an obvious

tactic, homeworking implementation is often conducted and implemented on an

informal basis (e.g. Tan-Solano and Kleiner, 2001). The implementation of

homeworking in this case has been successful because staff have been retained, output

and delivery have been maintained (if not increased) and staff remained satisfied and

committed. This, however, required a systematic approach as well as organisational

support and continual effort by the homeworkers, the line managers and the office based

team. It has also required continuous monitoring using different feedback channels, and

the evaluation of team effectiveness and output. Consequently, whilst homeworking

has been successful it has come at a cost; however in this instance, and on balance, the

benefits have outweighed the costs. It must be remembered that whilst homeworking

poses personnel challenges, these are likely to replace not add to issues which would be

present anyway if all staff were office based. In this context the implementation of

homeworking ensured the continued delivery of the occupational psychology team

effort to *inform decisions to influence change* without loss of experience or corporate

knowledge. This indicates that where teams are small, contain professional and

knowledge workers that alternative practices can be beneficial to all concerned.

Significantly, this case has demonstrated the importance of a hybrid approach, and

this appears to be the most practical and effective method of implementing

homeworking, allowing remote working at alternative locations, and importantly for

adjusting to a way of operating different 'home' and 'office' work streams. Often the

focus of homeworking is on the set up and adjustment to the new form of working, but

adequate attention must be given to planning the implementation and ensuring that all

the necessary conditions have been considered. It is more than feasible that both the

eventual homeworker and their line manager do not, and perhaps cannot, fully

appreciate what they are requesting and what they are offering. For instance, a

seemingly obvious retention solution may eventually 'drive' the homeworker away if

they become socially and professionally isolated or they lack adequate work life

balance. If homeworking is to be a long term staffing solution, then changing

circumstances must also be factored in; for instance, a line manager will probably not

have considered the long term impact of homeworking on office based workers. Indeed

it is likely that many line managers expect homeworking to be a more temporary

situation than the eventual outcome.

Homeworking success cannot be determined just by the initial set up. Instead

continual monitoring and review is required; indeed the homeworker, co-workers and

line management must guard against complacency, and should actively sustain the

mechanisms which contribute to positive outcomes. This requires the ongoing

collection and analysis of relevant information and relies on obtaining quality data.

From this perspective, homeworking appears to be a continuous action research

programme, requiring recurrent monitoring and readjustment as appropriate. This

approach does run the risk of investing more organisational energy with regard to

homeworking and inadvertently ignoring that office based working and work-related

interaction also needs monitoring and reviewing. Indeed due consideration must be

given to all team members including those who remain office based to provide a holistic

approach which suits the individual, the team and the organisation. It appears that

homeworking, given the ongoing prevalence of traditional office based approaches to

work and the level of effort required for implementation and ongoing support, is likely

to continue to be a temporary and transient activity for many individuals unless long

term investment is warranted.

Chapter 4: A Psychological Perspective on Environmental Scanning as it Applies

to Organisational Functioning - A Critical Literature Review

Introduction

In Chapter 4 I continue the theme of *informing decisions to influence change* by

critically reviewing a particular practice adopted to enhance the services of the

occupational psychology team (OPT) in question. As introduced in the case study in

Chapter 2, environmental scanning, which is defined as observing and monitoring

information from external sources, is conducted by OPT to provide contextual

information to help explain organisational research findings. This practice, however,

typically associated with collecting external information to inform strategic decision

making, appears to lack general guidance on how to conduct it and receives limited

attention from occupational psychology in general. This latter point was of interest to

me because environmental scanning seems an obvious topic of enquiry not least because

environmental scanning is a form of information seeking to meet organisational needs

and therefore bridges both cognitive and occupational psychology domains. In this

chapter I critically review environmental scanning literature to show how its practice

can be improved by occupational psychology intervention; and how occupational

psychology research can benefit from the products of environmental scanning, arguing

that environmental scanning can be a higher order skills set for occupational

psychologists.

Aguilar (1967) first coined the phrase 'environmental scanning' and defined the

concept as the "activity of acquiring information" (p. 1) collected through the "scanning

for information about events and relationships in a company's outside environment" (p.

7). More recently Albright (2004) expanded this definition to include the purpose and

stated that environmental scanning is "the internal communication of external information about issues that may influence an organization's decision-making process" (p. 40). It is interesting to postulate why there is limited occupational psychology research regarding environmental scanning despite the assertion by academics that environmental scanning is an important organisational process (e.g. Jain, 1984); and an argument that the wider environment and context in which organisations operate has a bearing on how they function (Arnold, 2007).

Environmental scanning should be interesting to psychologists because, like many other organisational procedures and practices, scanning is influenced by individuals' cognitive functioning, their behaviour and their perceptions. A better understanding of these psychological and behavioural processes could arguably enhance the practice of environmental scanning because occupational psychologists are well placed to investigate what limits the effectiveness of scanning and provide workable solutions. Furthermore the products and output of environmental scanning could be of benefit to occupational psychology by providing a method to collate external and contextual information. This information could be combined with data collected from the "invironment" inside an organisation (Frishammar, 2003, p. 318) to provide important context, thereby providing a more complete research perspective.

Method

Methodology. The literature review followed a systematic approach which involved five stages. These are outlined in Table 8. In terms of sourcing material, the review commenced with an initial key word search to interrogate electronic databases and determine relevant journals. From the initial articles which were sourced a more detailed secondary search was conducted by selecting articles from the reference sections of these papers. A record of the articles (and corresponding bibliography) was

compiled in Excel to assist this process.

Table 8

Critical Literature Review Methodology

Method	Description
Key word search	Generation of key words used to interrogate electronic databases such as ScienceDirect, JSTOR, Academic Search Premier, Business Source Premier and Emerald Management Reviews.
Secondary sources	Additional sources were selected from references of the literature identified from the initial search.
Database creation	A comprehensive list of each reference along with key points was compiled.
Analysis	The literature was compared against the research questions. Determination of key themes.
Evaluation	Critical evaluation of the literature and presentation according to key themes.

A preliminary review of the environmental scanning work revealed that the literature falls into several categories.

- Environmental scanning and its contribution to planning, strategy development, strategic decision making, organisation performance.

- The impact of managerial traits on environmental scanning.

- How organisational and contextual factors influence environmental scanning.

- Environmental scanning techniques, methods and approaches including environmental scanning models.

- Relevant and associated papers on topics such as environmental uncertainty, environmental turbulence, knowledge management, organisational interpretations systems and the use of information for future studies and foresight.

The literature review had the potential to be unfocused because the topic of

environmental scanning is wide ranging, therefore it was important to narrow the review parameters. It should be noted that much of the environmental scanning literature is predominantly from business and management orientated journals, which are often practitioner focused. Since the 1960s environmental scanning has been discussed in important management journals such as the Academy of Management Journal, Management Science and the Strategic Management Journal (e.g. Frishammar, 2002); although the purpose of many articles is to present and discuss real-world applications and solutions and not necessarily to investigate the underpinning theoretical frameworks or critically evaluate methodological issues. There are, however, articles which have attempted to put theoretical structure onto the process of environmental scanning (e.g. Saxby, Parker, Nitse and Dishman, 2002) and others which have sought to conduct research into the process (e.g. Frishammar, 2002).

Furthermore, it was apparent that as environmental scanning is not a familiar occupational psychology topic I would need a detailed structure by which to organise and critique the literature. It was not possible to find a subject matter expert within the field who could direct my review, therefore I drafted a list of research questions to guide the organisation of the literature sourced from the initial searches. The questions were drafted to help determine if there were any papers which bridged the gap between environmental scanning and occupational psychology and help me draw out the salient conclusions.

1. What influences the process and conduct of environmental scanning?

2. Is environmental scanning successful and effective?

3. What psychological theories could explain environmental scanning behaviour?

4. Why would the practice of environmental scanning be of interest to occupational psychology?

5. What does environmental scanning research tell us about the relationship between occupational psychology and environmental scanning?

6. How can occupational psychologists contribute to the process of environmental scanning; possibly to improve it?

7. Could environmental scanning be of benefit to occupational psychology?

8. What environmental scanning outputs could occupational psychologists use?

Questions 1 and 2 were asked to guide my review of the mechanics of environmental scanning and its contribution to organisational functioning. Whilst the review was not intended to be a description of environmental scanning procedures it was important to understand the rudiments of the practice, how this might differ and how effective this might be. For questions 3 and 4, I wanted to determine if any research had already applied psychological theory to better understand environmental scanning; and which I could extend to further associating environmental scanning and occupational psychology. Finally, questions 5 to 8 were related to the practical implications of associating environmental scanning and occupational psychology; and whether there was an existing (or future) mutually beneficial relationship which could improve the delivery of both practices.

Analysis

The analysis was guided by the above questions regarding the possible association between environmental scanning and occupational psychology. I compared and critiqued each article against these questions so that the key themes and conclusions which were determined helped answer these questions and were not merely a summary of the article's key findings. From this information, key themes emerged regarding observations about environmental scanning and how occupational psychology could explain its practice; and these were used to structure the chapter. Therefore I present the

critical literature review findings in following four sections:

1. General observations about environmental scanning research.

2. Environmental scanning as an information seeking activity.

3. How environmental scanning can benefit from occupational psychology: critically evaluating the potential contribution of occupational psychology by understanding the complexity of organisational behaviour, by improving research methods, and by developing optimal scanning processes.

4. How occupational psychology can benefit from environmental scanning: critically evaluating the potential value scanning could offer to occupational psychology research and practice; in particular the collation of external and contextual information; the development of such skills could enhance an occupational psychologist's skills set.

General Observations about Environmental Scanning Research

Environmental scanning has been a well-researched business operation for over 40 years and yet Choo (2001) stated that "our theoretical understanding of organizational scanning remains limited" (p. 3). The reason for this conclusion may be because much of the research sits firmly in the business domain and much of it is practitioner orientated (e.g. Ghezzi, Balocco and Rangone, 2010). The focus is often on defining environmental scanning (e.g. Aguilar, 1967); its purpose (e.g. Thomas, 1980); methods used to conduct the process (e.g. Albright, 2004); how this information is utilised by organisations (e.g. Daft and Weick, 1984); and how environmental scanning is linked to organisational functioning such as planning (e.g. Fahey and King, 1977), strategic decision making (e.g. Frishammar, 2003), competitive strategy (e.g. Babbar and Rai, 1993), and organisational performance (e.g. Lozada and Calantone, 1996). Recently, environmental scanning has become increasingly important to ensure

companies maintain their competitive advantage through use of external intelligence

(e.g. Dishman, and Calof, 2008); and as such research remains in the business domain.

This is not to say that theoretical or psychological processes have been entirely

neglected. Researchers have looked at the environmental scanning in relation to

managers' styles and preferences (e.g. Hough and White, 2004); information seeking

behaviour (e.g. Auster and Choo, 1994; Byrne, Mumford, Barrett, and Vessey, 2009);

and perceptions (e.g. Miliken, 1987); however the emphasis remains on scanning as a

mechanism or a means to an end (Kourtelli, 2000). New research has investigated

environmental scanning in relation to information literacy skills and the ability to obtain

appropriate and necessary information to assist organisational decisions making (Zhang,

Majid and Foo 2010).

In this chapter I will focus on research which regards environmental scanning as

an information seeking process and as such relates to occupational and cognitive

psychology (Hodgkinson, 2003). However, problem definition/information needs

(Huotari and Wilson, 2001), information interpretation/sensemaking (Thomas, 1980),

and the wider impact of external information on organisational decisions and behaviour

(Pfeffer and Salancik, 1978) would also be of merit as topics.

Environmental Scanning as an Information Seeking Activity

Choo (2001) argued that environmental scanning is essentially a form of

information seeking behaviour, which Rouse and Rouse (1984) described as a "process

of identifying and choosing among alternative information sources" (p. 131) for the

purpose of satisfying some informational need (Wilson, 2000), and solving a problem or

making a decision (Correia and Wilson, 2001). Viewing environmental scanning as an

information seeking behaviour, rather than a data collection procedure or role, might

well explain why environmental scanning is not generally conducted by analysts (in-

house or contractorised) but instead is generally conducted by executives and managers

(Jain, 1984; Garg, Walters and Priem, 2003). Formal scanning units do exist and indeed

some early researchers have called for these (Porter, 1980), yet few organisations tend

to use them (Stubbert, 1982; Maier, Rainer and Snyder, 1997). Furthermore the

effectiveness of formal scanning units has yet to be demonstrated (Lenz and Egledow,

1986). The propensity for environmental scanning to be conducted by managers is a

significant observation by researchers (e.g. Fahey and King, 1977; Lozado and

Calantone, 1996) because despite environmental scanning being considered as a

prerequisite condition for strategy development (Beal, 2002) it is not generally regarded

as a formalised data gathering activity (Aguilar, 1967) despite it being described by

some researchers as a data gathering tool (e.g. Daft and Weick, 1984). Recent research

has re-emphasised the importance of environmental scanning as an information seeking

behaviour which is a vital part of a manager's tool kit (e.g. Marcy and Mumford, 2010)

and which is related to innovative behaviour (e.g. Byrne et al., 2009).

Information Seeking Activity

Choo (2001) drew attention to the role of managers in environmental scanning

and how their information seeking behaviour can affect how they conduct

environmental scanning and how the information is utilised. Ghoshal and Westney

(1991) found that managers favoured their own data collection, rather than that of

analysts, as they believed these specialists lacked product management experience and

competitive knowledge necessary to understand and interpret information collated

through scanning. This is partly because many managers trust their intuition (Aguilar,

1967) but also they tend to seek information to back up and reinforce ideas rather than

inform them (Daft, Sormunen, and Parks, 1988). Research has shown that managers are

often directed by personal preference and the need for efficiency. Cyert and March

(1963) suggested that managers are only concerned with information which is familiar, expedient and not costly to collect; unsurprising if they are collating the data themselves, but may also be a sign of times when information was less available, that is, before the internet (Lafaye, 2009). Boyd and Fulk (1996) also found that overly complex information was a disincentive to conduct scanning, and indeed Correia and Wilson (2001) found that managers only conduct a limited amount of scanning perhaps suggesting economy of effort by managers (Hambrick, 1982). Recently, Zhang et al. (2010) have noted that the ability to handle information does not make a manager   · 'information literate' nor does it mean that they conduct adequate analysis (Myburgh, 2004).

Furthermore, despite there being some early frameworks devising to encourage optimal scanning (e.g. Aguilar, 1967; Fahey and King, 1977), environmental scanning is often performed on an ad hoc basis (Correia and Wilson, 2001). It is often conducted in response to a particular need or "usually initiated as a consequence of some unanticipated event" (Fahey and King, 1977, p. 71). Smart and Vertinsky (1984) argued that information seeking is an important coping activity which can help managers regain a sense of control especially in dynamic environments (Wang and Chan, 1995). Being able to make long term predictions based on environmental scanning can also give managers a sense of control (White, Dittrich, and Lang, 1980) and reduce anxiety (Elenkov, 1997). Certainly, managers can seek information in order to exert a sense of control although this may be an illusion (Schwenk, 1988). Having a sense of control may be a motivation to conduct environmental scanning but it is likely that managers will be subject to cognitive bias and only seek confirmatory facts, ignoring information which conflicts with their own ideas (Langer, 1983).

Information Seeking Perceptions

How scanning is conducted is largely determined by how managers perceive and evaluate the external environment. Although Aguilar (1967) observed that managers consider the scope and significance of information and its potential relationship to long term strategy, scanning may still be conducted according to managers' preferences for confirmatory evidence (Daft et al., 1988). Furthermore, Hambrick (1982) concluded that managers had a tendency to seek information consistent with their own preferences and interests rather than organisational strategy, perhaps because as he suggested managers do not readily understand their own organisational strategy and therefore do not know what information will contribute to it. Pfeffer and Salancik (1978) highlighted that the necessity of information appeared to motivate managers' behaviour.

Boyd and Fulk (1996) found that perceived strategic importance of information was the key predictor of whether Chief Executive Officers (CEOs) conducted scanning; presumably here CEOs understood their strategic direction unlike other managers (Hambrick, 1982). Certainly, the pertinence and significance of information, and the value attributed to it (Correia and Wilson, 2001) can be a driver to acquire it. This is especially the case if the information will improve competitive gain (Hambrick, 1982); although it has to be perceived as accessible (May, Steward and Sweo, 2000).

How uncertain the environment is perceived to be can also affect information seeking behaviour (Terry, 1977; Suh, Key and Munchus, 2004). Daft et al. (1988) found that the amount of perceived environmental uncertainty determined what and when scanning took place. Reducing uncertainty and ambiguity is a reason to scan (Milliken, 1987) because it makes the environment appear more predictable. In his Swedish manufacturing industry case study Frishammar (2003) defined uncertainty as the difference between the information which is gathered and that which is needed, and

as such if this gap is not addressed there can be difficulties in accurately predicting organisational outcomes. He found organisations engaged in environmental scanning in order to reduce risk and identify threats and opportunities, thereby seeking to deal with the inherent uncertainty of the external environment. Uncertainty also drives the amount of scanning (Lozado and Calantone, 1996; Auster and Choo, 1993; Boyd and Fulk, 1996).

Hough and White (2004) found that as environmental uncertainty increased so did scanning behaviour, although they proposed a non-linear relationship expecting increased uncertainty would only increase scanning behaviour up to a given point. Personal tolerance for ambiguity (Goldstein and Blackman, 1977) can also have a mediating effect. If individuals have a low tolerance for ambiguity they may avoid information which suggests environment uncertainty and therefore these managers perceive their environment to be more predictable than it actually is. Certainly, new research is emerging that managers' motivations impact on their information seeking behaviour especially with regard to how important they consider it to be and their ability to realise the potential of such data capture (Anderson, 2008).

Type of Information Sought

Managers certainly want to retain a sense of control during environmental scanning, for instance, the type of information obtained (Ghosal and Westney, 1991). In Frishammar's (2003) case study he found that for managers 'soft' data, such as developing a frame of reference, was more important at the start of the environmental scanning process; but once this context had been established, hard data was then used to provide quantifiable information. He also found that obtaining data through solicited (explicitly sought) sources was preferred over unsolicited (unintentional) methods. Finally, he observed that whilst executives used external sources of information such as

customers and performance reports, they still relied on internal sources (often informal

such as colleagues) for information about the external environment. Interestingly,

Menon and Pfeffer (2003) found that managers had a preference for external

information even if it was scarce because it was regarded to be "special and unique" (p.

497). Decker, Wagner and Scholz (2005) argued that environmental scanning was data

not goal driven which suggests that despite strategy development being a desired end

state, environmental scanning is not necessarily conducted with this aim in mind.

Worryingly, though the assertion by Decker et al. (2005) may only be half the truth, as

much scanning by managers does not even appear to be data driven but in fact

judgement driven instead. For example, differences in decisions may not be a result of

misinterpreting information but instead due to the different cognitive preferences of

managers (Gallen, 1997).

How Environmental Scanning Can Benefit From Occupational Psychology

Daft and Weick (1984) referencing Pfeffer and Salanik (1978) stated that

"scanning is a key topic for explaining organizational behavior" (p. 285), and limited

research effort has been expended on understanding the environmental scanning

process. Occupational psychologists are well placed to improve this understanding by

providing explanations of how and why scanning behaviour occurs as it does and what

interventions might improve this situation. Some recent environmental scanning efforts

have focused on automating information collection systems to reduce information

overload and improve the decisions made as a result of environmental scanning (e.g.

Lafaye, 2009). However, it remains the case that much environmental scanning even if

using the internet will be manual and the foibles of manager's information seeking

behaviour will remain.

Understanding Environmental Scanning Behaviour

Research into environmental scanning has already demonstrated that this form of organisational information seeking is often ad hoc, irregular and discontinuous (Fahey and King, 1977); described by Jain (1984) as an art form. In addition, environmental scanning is subject to perceptions, preferences and biases which further undermine its effectiveness (Elenkov, 1997). Occupational psychology could enhance the understanding of environmental scanning by explaining the reasons for these cognitive, attitudinal and behavioural manifestations. Only by understanding the causes of such issues can adequate solutions or strategies be employed. Hodgkinson (2003) in his editorial for the Journal of Occupational and Organizational Psychology (JOOP) on the linkages between cognitive and organisational psychology, described several important factors which could explain sub optimal information seeking. Individuals have an innately limited capacity to deal with information and whilst this capacity can be developed (Miller, 1956), many managers are likely to feel quickly overwhelmed by information and potentially avoid it, especially if it is complex (Boyd and Fulk, 1996). Information processing strategies and mental models will also have an impact on environmental scanning interpretation; and experience developing these could influence further information seeking behaviour.

Crucially, occupational psychology can contribute to environmental scanning by understanding the multiple variables and relationships which impinge on the process; attempting to explain variability and complexity (Selznick, 1976; Rousseau, 2009). For instance, the notion of information within environmental scanning research appears to be treated as a homogenous concept, that is, something managers scan for, but this perspective neglects the likely complexity of this information. Previous research has highlighted the type of information which is gathered, for example, external sources

such as reports versus internal information such as hearsay (Frishammar, 2003); however there is no observation of the quality, validity, reliability, relevance, or 'sell-by' date of information. The literature is beginning to raise the issue of information quality but not necessarily investigate this empirically and only in specific sectors such as libraries (e.g. Karim, 2004). This should be of growing concern given the proliferation of information available via the internet (Teo and Choo, 2001; Rajanemi, 2007; and Lafaye, 2009) but environmental scanning research has been slow to study this issue (Decker et al., 2005). These factors are likely to have moderating or mediating influences on how managers scan.

Psychology could be used to investigate the relationships between the different information seeking aspects; for instance, how does a manager's perception of the environment (e.g. Terry, 1977; Andrews, 2008) influence their cognitive bias for confirmatory evidence (e.g. Daft at al., 1988) and cause them to seek only certain types of information (e.g. Frishammar, 2003). This of course introduces complexity and creates challenges for management research, but surely it is the understanding of this complexity that will help guide appropriate and relevant organisational solutions which reflect the "messy reality of contemporary work and organizational life" (Rousseau and Fried, 2001, p. 3). A word of caution is valid at this point, because whilst occupational psychologists have the knowledge and skills to deal with complexity of organisational issues, there have been a number of commentaries recently (e.g. Rousseau and Fried, 2001; Rousseau, 2009) which have complained that organisational psychology research is simplifying these complex issues or applying reductionism where, as Hackman (2003) notes, researchers feel the need "to turn to ever lower levels of analysis to generate ever more 'basic' understanding of our phenomena" (p. 905).

Measuring Environmental Scanning Behaviour

Occupational psychology research is also well placed to measure environmental scanning behaviour and its effects, and this could address the paucity of information on how environmental scanning is utilised by an organisation or whether the information gathered is effective in informing organisational strategy (Daft and Weick, 1984). Research into environmental scanning has had a number of methodological issues which has made comparison and generalisability difficult. For instance, research into scanning involves a broad range of individuals such as analysts (e.g. Stubbart, 1982), managers (e.g. Kumar, Subramanian and Strandholm, 2001) and CEOs (e.g. Garg et al., 2003) which raises questions of comparability across results; indeed, managers are often lumped together as one mass group (e.g. Suh et al., 2004).

Research methods are variable and rely on self report accounts about how individuals conduct environmental scanning (e.g. Ghoshal and Westney, 1991) and this raises issues of the validity of results (Mitchell, 1985) and the possibility that individuals do not actually perform scanning in the manner they describe. If self-report methods are to be used, perhaps an expansion of Frishammar's (2002; 2003) case study approach or a diary methodology (e.g. Alaszewski, 2006) would be appropriate. Ideally, more direct observation of the activities which relate to environmental scanning and a record of what is collected; why it is collected; from which sources and how it is used; would be useful to better understand the entire process.

There have been innovative techniques such as a strategic decision making simulation (Hough and White, 1984) and a computer based experiment (Decker et al., 2004) which observed scanning in action but both remain concerned with simulation rather than actual behaviour. Furthermore, the cross sectional nature of research does not permit certain questions to be addressed such as how successful was the scanning,

who utilised the information, what decisions were made, what changed as a result of the

scanning? Therefore, it is proposed that occupational psychology could offer

environmental scanning research rigorous and multi-method data collection (Drenth and

Heller, 2004) to improve validity through triangulation (Mitchell, 1985), or to employ

longitudinal approaches to measure results over time.

Improving Environmental Scanning Behaviour

Research has demonstrated that despite models to guide environmental scanning

(e.g. Aguilar, 1967; Daft and Weick, 1984; and Choo, 2001) environmental scanning is

not necessarily conducted in an optimal manner; although a clearer understanding of the

problems will provide the foundation for the development of appropriate strategies to

improve scanning. Given the possibility of environmental scanning gathered

information being used to guide strategic decision making (Leng and Engledow, 1986;

Byrne et al., 2009), align the organisation with the environment (Babbar and Rai, 1993)

and respond to competitors (Albright, 2004), it could be very costly to poorly conduct

environmental scanning (Choudhury and Sampler, 1997). There are several different

areas where occupational psychology interventions could improve scanning and these

include defining the *requirement*, improving the *process*, understanding *individual*

differences, and *informational influences* (Figure 5). Each of these areas would require

further investigation (outside the scope of this review) but there is the potential to

develop appropriate solutions to the above issues.
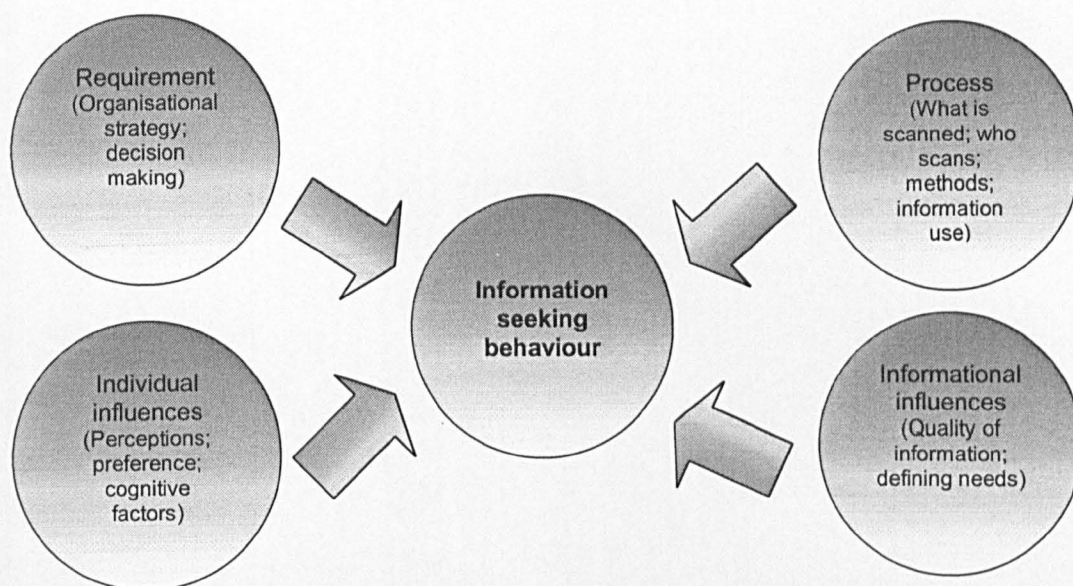
Figure 5: **Psychological Aspects of Environmental Scanning.** This model outlines different psychological processes which may influence information seeking behaviour; adapted from Choo (2001).

How Occupational Psychology Can Benefit From Environmental Scanning

Although occupational psychology can contribute to environmental scanning, on the other side of the coin occupational psychology could potentially benefit from environmental scanning.

Environmental Scanning to Understand the External World

Environmental scanning is a method and practice which can be employed to collect external information through directed and undirected searching (Daft and Weick, 1984). Here I refer to environmental scanning as a model for data collection not the sub optimal information seeking activity which is often practiced; that is, how environmental scanning should be conducted not how it is conducted. This form of environmental scanning is related to information seeking to gather a range of external information to better understand the external context and not for a directed purpose such as strategic issue diagnosis (Dutton and Duncan, 1987), market intelligence (Saxby et al., 2002) or SWOT/PEST analysis (Costa, 1995). A useful model of environmental

scanning for occupational psychology is one which provides an overview of the external

environment covering societal/demographic, political, legislative, economic,

environmental, and technological fields (Pashiardis, 1996).

Furthermore, the concept of environmental scanning should include, not just

collating information, but highlighting key trends, relationships between key external

events and offer an interpretation of this data (Kefalas and Schoderbeck, 1973). The

external environment will have a bearing on an organisation from the people it employs,

the policies and laws it follows, to the environment it operates in. No organisation is a

closed system and thus the external environment will impact to some extent on the

organisation and its members (Scott, 1987). The external environment is continually

changing and thus requires constant monitoring (Yasai-Ardakai and Nystom, 1996)

especially with globalisation (Furnham, 2004), international work behaviour (Rousseau

and Fried, 2001) and the fast pace of change (Kourtelli, 2000) becoming increasingly

important.

Environmental Scanning to Provide Context

The second and most significant benefit of environmental scanning for

occupational psychology is the information which can be collected through scanning the

external environment. Contextual information has long been regarded as an important

business requirement (Fahey and King, 1977) but recent editorials in JOOP and the

Journal of Organizational Behavior (JOB) (e.g. Johns, 2006; Rousseau, 2009) have

highlighted the absence of context from occupational and organisational psychology

research. Cappelli and Sherer (1991) defined context as "the surroundings associated

with phenomena which help to illuminate that phenomena" (p. 56). However, Cappelli

and Sherer (1991) and Mowday and Sutton (1993) proposed that the influence of

context is not emphasised in research and therefore the 'illumination' or "sense of

orientation" (Chmiel, 2000, p. 5) of organisational phenomena does not take place.

Blair and Hunt (1986) suggest this is because context-free research appears in some

ways 'more scientific'; but it could also demonstrate a reluctance for researchers to

grapple with the complexities of real world organisational functioning, the "messy

reality" which Rousseau and Fried (2001) highlighted (p. 3).

Cappelli and Sherer (1991) argued that many organisational psychology theories

have a cognitive bias and therefore are 'contextless' but consequently fail to appreciate

the different organisational layers and how organisational behaviour should be analysed

according to these layers; a surprising revelation given that psychologists should

appreciate complexity and variability (Selznick, 1996). This internal focus is at odds

with the ethos of environmental scanning (Aguilar, 1967) and the importance of the

organisation as an open system (Scott, 1987; Drenth and Heller, 2004).

The inclusion of context in academic organisational research remains patchy

(Arnold, 2004) and has been recently highlighted as a failing of occupational

psychology and organisational behaviour research (Johns, 2006; Rousseau and Fried,

2001). In fact, the importance of context has begun to become a key topic in

organisational behaviour along with change (Porter, 2008) and has generated much

debate (Rousseau, 2009; Ashkanasy, 2009). Whilst it might be regarded as obvious that

organisations and environments are interwoven concepts (Miles, Snow and Pfeffer,

1974) and that it is important to reflect the context in organisational research (Arnold,

2004), it should not be assumed that it is readily available or that the researchers

properly understand it, especially if their focus is inwards (Porter, 2008).

Contextual information should be included because it grounds research and

makes the findings readily applicable, helping practitioners determine the connections

between phenomena (Rousseau and Fried, 2001), and encouraging better management

buy in (Johns, 1993). Furthermore, there is the potential to make models more robust

(Schneider, 1985); for instance, considering turnover trends in the light of recession; or

absenteeism against the context of healthcare cuts (Gaudine and Saks, 2001). Porter

(2008) argued that despite highlighting organisational change many studies treat the

external environment as relatively stable and yet the working context has changed

markedly over recent years; for instance, a decline in manufacturing and a surge in

service oriented organisations (Tosi and Mero, 2003), and explosion of technology and

IT based operations (Rousseau 1997); not to mention a range of political, social, and

environmental changes and boundary conditions (Coyle-Shapiro, 2009).

As Porter (2008) states the external environment 'intrudes' into the internal

organisational environment and there is a need for organisational psychology "to be

more outward orientated than it has been in the past and is in the present" (p. 524;

attempting to contextualise research (Hackman, 2003) and recognise as Rousseau

(2009) states "organisation-environment dynamics" (p. 10). Failure to take the context

into account is regarded as one reason personnel initiatives are unsuccessful (Johns,

1993), or why discredited approaches continue to be implemented (Johns, 2001).

Conversely, the context might also tell us why innovations are successful despite

evidence to the contrary (Sutton and Hargadon, 1996). Ignoring context also makes it

difficult to situate the research because circumstances and events are likely to have an

impact; for instance, pre-internet research (Rousseau and Fried, 2001), national culture

(D'Inbane, 2002), or location (Rousseau and Fried, 2001). Positively the need to

understand the outside environment and wider work context is being recognised more

by researchers. Furnham (2004) argued that occupational psychologists are

appreciating this and are not restricted by historical approaches to occupational

psychology. Guest (1999) highlighted the need to understand human resources (HR)

policies both inside and outside the organisation; and Jackson and Schuler (1995)

emphasised how labour market conditions can affect the employment relationship. New

research even tackles the issue of context head on (e.g. Poppleton, Briner and Kiefer,

2008).

Environmental Scanning as a Data Gathering Tool

Environmental scanning as an approach is an ideal data gathering tool to collate

important context information as well as information about the external environment;

factors which might influence or impact on an organisation and the individuals within it.

The importance of including context is well argued in recent literature, however this is

sometimes confined to general context, such as the country in which the research takes

place (e.g. D'Inbane, 2002), or a historical perspective (e.g. Rousseau and Johns, 2001)

not necessarily the wider and more complex environmental context.

One area which has a major bearing is societal context; for example, the aging

population, racial diversity, increase in numbers of working women. This contextual

information would assist in defining research questions, explaining research findings, as

well as the applicability of research conclusions (Rousseau and Fried, 2001).

Disappointingly, academics do not state how to obtain contextual information; it should

not be assumed that occupational psychology researchers and practitioners know how to

collate such information or determine what is significant. Johns (2006) alludes to the

utility of environmental scanning when he states that employment market conditions

might be of contextual interest but environmental scanning is not explicitly cited. Even

in Poppleton et al.'s (2008) research, which attempts to address the lack of context

within occupational psychology research, the researchers do not state how they

determined key context. Guidance on how to interpret the context in which research is

conducted will surely encourage further contextualisation. Regarding environmental

scanning as an information seeking approach may well provide an ideal frame of

reference for occupational psychology to consider utilising the practice.

Environmental Scanning as a Higher Order Skill for Occupational Psychologists

The integration of environmental scanning into the tool box of occupational

psychology, at least to determine key context, could be achieved on several layers.

Environmental scanning can provide external information to reinforce an argument or

explain findings; for instance, the provision of employment statistics. This approach

might be useful for research purposes to help understand a given context, by setting the

scene and designing the research accordingly (Rousseau and Fried, 2001). A more

continuous monitoring of the external environment may be more appropriate for

practitioners who need to be more aware of environmental changes in order to

appreciate their potential impact and influence on the organisation and the individuals

within it (Greenhaigh and Roseblatt, 1984); especially those who operate as in-house

practitioners. This contextual information could be used to guide research design,

psychological intervention, and be combined with internally derived information such

as organisational climate, performance indicators (Slaughter, 1990), organisational

strength and weaknesses (Pashiardis, 1996) and employee information (Karim, 2004).

Concerns about having the appropriate skills to conduct environmental scanning or

understand the information derived may well be unfounded. Externally derived

information should be treated as secondary data, and subjected to critique just as journal

articles or externally sourced research might be. Indeed psychologists are trained to

conduct such analysis and appraisal (Hayes, 1996) but in the case of environmental

scanning the data is often not research derived.

Of course, environmental scanning is not just about information seeking but

interpretation (Daft and Weick, 1984) and sensemaking (Thomas, 1993) and combining

this data with other sources. Occupational psychologists have the background

knowledge and training to adapt their quantitative and qualitative data collection

techniques and apply these to external scanning. These additional skills can be part of a

psychologist's professional development and importantly provide a broader range of

techniques vital for adaptation in an ever changing market. In particular, globalisation is

a key driver and another reason for psychologists to be able to appreciate the external

environment (Gelfand, Leslie and Fehr, 2008).

Discussion

Occupational and organisational psychology research historically has had an

internal focus, concerned with the invironment within an organisation (Furnham, 2004).

Management and business research on the other hand looks at factors that influence

organisational functioning from both the internal and external environments.

Organisations often employ the practice of environmental scanning to assist strategic

decision making (Aguilar, 1967) and make sense of trends, events and the relationships

between these (Daft et al., 1988). I have focused my review of the environmental

scanning literature on its manifestation as a form of information seeking (e.g. Choo,

2001) which is conducted to inform and guide strategic decision making but I have

concluded that as a research topic it remains of limited interest to occupational

psychology.

Environmental scanning was coined as a phrase in 1967 (Aguilar) with several

key papers written in the late 1970s and early 1980s (e.g. Fahey and King, 1977; Jain,

1984) regarding its practice. However, a temporal pattern of key environmental

scanning topics is not easy to ascertain. Certainly environmental scanning is a well-

researched business practice and yet it lacks a coherent theoretical framework after over

40 years (Choo, 2001). Attempts have been made to link environmental scanning to

theoretical propositions including psychological processes but have yet to become a

mainstream occupational psychology topic. The focus on environmental scanning as an

information seeking activity (e.g. Choo, 2001) has been the most explicit connection to

psychology (and is a link to both cognitive and occupational psychology, Hodgkinson,

2003). Much of this research is from the 1990s and early 2000s but there has been some

recent interest in relation to information literacy (e.g. Zhang et al., 2010) and the

importance of environmental scanning as a tool for managers (e.g. Byrne et al., 2009).

My aim was to determine the associations between environmental scanning and

occupational psychology because I saw a connection not explicitly exploited in research

or practice. This connection came from my work with the occupational psychology

team where we conduct both internal and external scanning of information to provide a

well informed picture; and where internally derived information is far more meaningful

if set within relevant context. As the lead for the external and environmental scanning

effort I was increasingly aware of the lack of general guidance on how to conduct it, the

focus on business information and the lack of psychological input despite it being an

obvious topic of interest. Furthermore I was interested, as a practitioner, in trying to

push boundaries of occupational psychology in terms of what we can delivery and what

information decisions should be based on. Indeed, whilst occupational psychology is

often inward looking, there are a range of variables in the outside environment which

impact on the internal workings of an organisation and awareness, if not understanding,

of these should surely improve an occupational psychologist's services.

In terms of how environmental scanning can benefit from occupational

psychology, I have concluded that both academics and practitioners of occupational

psychology could contribute to a better understanding of environmental scanning

behaviour and causes of sub-optimal scanning. They can do this by conducting

dedicated research and designing appropriate solutions to improve the practice. In

particular, research could consider moderating factors and organisational complexity

which influence environmental scanning something that existing research has not yet

contemplated. Furthermore, occupational psychology multi-method research techniques

such as observational and event related methods (e.g. Poppleton et al., 2008) could be

employed to more thoroughly investigate environmental scanning behaviour,

particularly in terms of information seeking behaviour and effectiveness. Only then can

the outcomes of environmental scanning be better understood. Within this review I

have proposed a 4 factor model adapted from Choo (2001) to describe the psychological

aspects of environmental scanning to show the complexity and multiple stages involved

in optimal environmental scanning. Awareness, and even understanding, of these

factors should at the very least improve a manager's scanning behaviour because it

should raise their cognisance of the issues involved.

In conducting this review I have also concluded that environmental scanning can

be of benefit to occupational psychology as it is an ideal tool for collating external and

contextual information. This information can provide useful context about recent events

and helps set occupational psychology research in the 'real-world' (Rousseau and Fried,

2001). To be competitive with management and HR research, occupational and

organisational psychology research must demonstrate an understanding of the

circumstances which create particular conditions and show an appreciation that not all

organisational behaviour is 'acontextual' (Cappelli and Sherer, 1991). This does not

'dilute' the nature of occupational psychology, although perhaps some occupational

psychologists would see this as straying into research areas traditionally outside the

bailiwick of occupational psychology; something that followers of organisational

behaviour are happy to do (e.g. Johns, 2006). The collation and interpretation of

environmentally scanned information can be developed as a higher order skill for

practitioner psychologists to help them gauge the impact of the environment on the

organisation and its members.

Contribution to Knowledge and Practice

This study contributes to both occupational psychology knowledge and practice.

Firstly, I have outlined a new way to consider environmental scanning which is

traditionally a business orientated approach and tool. Through a new lens of

occupational psychology, I have argued that environmental scanning can be viewed as

providing valuable contextual information to improve how occupational psychology

deals with the "messy reality of contemporary work and organizational life" (Rousseau

and Fried, 2001, p.3). Importantly, this review has noted significant omissions in the

environmental scanning research including a lack of appraisal of the information

collated for the purpose of environmental scanning; the treatment of information as a

homogenous concept, neglecting both the likely complexity and variable quality; and a

lack of recognition of moderating variables, for example, how do managers' cognitive

preferences impact on their environmental scanning behaviour. I have also highlighted

that the research also relies on self-reporting accounts by managers and there has been a

general lack of longitudinal observation of environmental scanning behaviour in action.

With regard to practical contributions, I presented the findings of my review in

four sections with two main questions – how can environmental scanning benefit from

occupational psychology; and how can occupational psychology benefit from

environmental scanning? The main contribution therefore is the conclusion that there is

great scope for collaborative and supportive work, not least in the area of improving the

conduct of environmental scanning, and contextual information determination.

Occupational psychologists can develop their environmental scanning and external

information seeking behaviour as a higher order skill to enhance their practice by ensuring that they understand external forces which influence organisational functioning. In conducting this scanning it is more than likely, as I have found, that psychologists will draw on their previous experience and research skills to improve the way in which they gather, collate, analyse, interpret and present such data. These improvements will undoubtedly be of interest to managers who have, in some cases, limited time and inclination to properly conduct and develop their own environmental scanning.

Conclusion

Environmental scanning has been utilised by OPT for a number of years to formalise the collation of contextual and information about the external environment; this information provides a balance to the internal scanning conducted within the RAF to present a well balanced picture of personnel issues. As in-house practitioners it is important that OPT understands the external environment, and environmental scanning helps the team to recognise the external factors that influence internal organisational behaviour in order to *inform decisions to influence change.*

To conclude, environmental scanning may not currently be of particular interest to occupational psychology because it is an activity concerned with issues in the external environment and is generally conducted to address business needs (Aguilar, 1967). However, I have argued that it is a process which can benefit from further occupational psychology research and intervention to enhance the practice. Occupational psychologists should treat environmental scanning as any other organisational process or procedure which at times is under-utilised and could benefit from an objective investigation and intervention. Significantly, to counter the criticism that occupational psychology is not sufficiently contextualised (e.g. Arnold, 2004), I

have argued that environmental scanning can be employed as a technique to monitor

and collate information from the external environment to benefit both research and

practical applications and ensure that in the future occupational psychology does not

operate in a vacuum (Johns, 2006).

Chapter 5: A Study of Applicants' Perceptions Towards RAF Recruitment – An Empirical Project

Introduction

In Chapter 5 I present a large scale research study, involving qualitative and quantitative phases, conducted with the purpose of informing Royal Air Force (RAF) recruitment policy and delivery. This study represents the type of large scale research project that OPT would be tasked with. It also represents an example of new ways of working in action. The new ways of working came about through organisational change (discussed in Chapter 2) and was facilitated by learning during my doctorate. The new way of working reflected the desire to push boundaries and provide appropriate and bespoke services. To this end the project incorporated a new theoretical underpinning which was considered as appropriate to guide the research design and the employment of a new methodology to enhance the study findings.

This research was commissioned to understand individuals' motivations to apply to join the RAF; how the RAF is viewed by applicants (confirming or disconfirming assumptions about the impression the RAF makes on such individuals) with the intention of adjusting recruitment and marketing effort as a result of the findings; and to understand potential recruitment outcomes such as job acceptance intentions. Impressions that applicants hold about a job and organisation are also known as applicant perceptions and fall under the portmanteau term of social processes of recruitment and selection (Derous and De Witte, 2001). This study focused on those perceptions present during the application phase of recruitment rather than during selection per se, and as such concentrated on 'attraction' not 'assessment' (Searle, 2003). Using the social process framework, the research was designed to bring rigour to

a real-world organisational issue and demonstrate pragmatic science by combining

theory and research to deliver a product with practical and generalisable implications

(Anderson et al., 2001) and contribute to further understanding of social processes in

recruitment.

Recruitment and Selection Research

Recruitment and selection are topics in occupational and organisational

psychology which have spawned an abundance of theory and associated research,

particularly between the years of 1970 and 2000 (Breaugh and Starke, 2000). There has

also been a wealth of research reviews into individual elements of recruitment and

selection (e.g. Barber, 1998; Rynes, 1991; Wanous, 1992). Recruitment and selection

research and theory fall into two main camps: the traditional, psychometric approach,

and the more recent social processes approach.

Traditional Approach

The majority of research and practice have been conducted in what is termed as

traditional recruitment and selection (Ployhart and Ryan, 1997). Derous and De Witte

(2001) described this as the traditional psychometric approach (TPA) which they

defined as the "prediction of future work behaviour" (p. 320), where recruitment and

selection effort is about assessing performance and potential to succeed at a given job

by measuring an applicant's ability against particular criteria. This traditional approach

has centred on measurement aspects such as reliability and validity of selection methods

(Conway, Jako, and Goodman, 1995); job analysis (Hough and Oswald, 2000);

efficiency of testing (Derous and De Witte, 2001); and instruments with psychometric

properties (Schmidt and Hunter, 1998).

The assessment focus has produced very worthy and important research on the

utility and predictive power of various selection methods (Robertson and Smith, 2001)

and much of this research has been implemented within selection and assessment practice. One only has to observe the range of different selection methods and plethora of assessment centres which are run (e.g. Gaugler, Rosenthal, Thornton, and Bentson, 1987) to conclude that organisations are constantly trying to ensure that they are selecting the correct individuals for the right jobs. This is, of course, not to infer that organisations are always successful in their attempts, and indeed the use of the low validity unstructured interview remains a favourite with managers and some recruiters (Robertson and Smith, 2001). Derous and De Witte (2001) have argued that the TPA's focus on future work behaviour, whilst laudable, is flawed because it fails to recognise the attitudes and perceptions of applicants, and the impact of these on selection. They argue that the traditional approach assumes "both jobs and persons to be "stable" entities, making prediction of future work behaviour entirely possible" (p. 321).

Derous and De Witte also argue that this approach may have been valid in the past where 'person-job fit' was possible but now individuals need to be tested for the potential to be flexible, innovative, adaptable and have a positive attitude to change (Anderson, Lievens, van Dam and Ryan, 2004). Furthermore, with the ever changing job market and the changing expectations and preferences of job seekers and applicants, this flexible approach reduces the likelihood of job role stability. Significantly, Derous and De Witte (2001) and Schuler (1993) argue that the traditional approach is organisationally orientated ignoring the importance of different stakeholders. To this end, Derous and De Witte (2001) labelled an alternative perspective as the negotiation approach (NA) which recognises a more complex set of social processes within recruitment and selection which have hitherto been largely ignored (Herriot, 2002). In sum, the traditional approach to recruitment and selection has focused on stability of individuals and jobs; has been organisation orientated, has been focused on ensuring

appropriate measurement of potential in order to select the best candidate. As a result

this approach has ignored the complicated arena of applicant expectations, attitudes and

preferences; how these individuals view the recruitment and selection process; and the

implications of such perceptions.

Social Processes Approach

Echoing Derous and De Witte (2001), Anderson et al. (2004) proposed that an

over-reliance on the traditional approach to recruitment and selection (and associated

research) might not be adequate (Lievens, Van Dam and Anderson, 2002) because the

assessment of performance alone cannot guarantee an applicant's commitment to the

selection process in the short term, let alone long term benefits such as job satisfaction

(Iles and Robertson, 1997). One such challenge to the traditional approach is to view

recruitment and selection as social processes (Derous and De Witte, 2001; Herriot,

2002). The move to develop this new research approach is two pronged. The social

process approach offers to address the limitations of the traditional approach (Anderson

et al., 2004), and is also a response to forecasting future trends and challenges for the

recruitment and selection field such as addressing the potential inadequacy of the

'person-job fit' model, and the importance of recognising applicant reactions and

decision making (Lievens et al., 2002). Likely future challenges include the changes

(real or perceived) to how organisations operate (Howard, 1995); the careers that

individuals might develop and experience (Arnold, 1997); the growing competition for

high quality applicants (Allen, Van Scotter and Otondo, 2004; Collins and Han, 2004);

as well as changing societal trends (Terjesen, Vinnicombe and Freeman, 2007).

Appreciating recruitment and selection as social processes is about

acknowledging that recruitment is more than an organisation selecting the most

competent or available individual for a given job, but is also the recognition that

recruitment and selection activities take place in a dynamic environment where both the

organisation and the individual are stakeholders (Schuler, 1993). This shift in the sense

of control or "power nexus" (Derous and De Witte, 2001; p. 321) acknowledges that the

applicant's attitudes should have as much credibility as the organisation's judgements.

Indeed Schuler (1993) reaffirmed Porter, Lawler and Hackman's (1975) early assertions

by stating that *both* the applicant and the organisation evaluate each other and decide

whether to pursue the selection; performance assessment alone is not the only process at

work. Ryan and Ployhart (2000) also stated "that selection involves two parties: the

organization selects employees, but applicants also select - where they will apply and

where they will work" (p. 567).

The development of a social relationship was reiterated by Herriot (2002)

describing the reciprocal social process of selection as "two-way interactive and inter-

subjective" (p. 385); and which Searle (2003) called the "two way power relationship"

(p. 5); this again highlights that control within recruitment is not just with the

organisation to select an individual but with the applicant to choose the organisation.

Moreover, the social process approach recognises the importance of applicant

perceptions and how these shape an individual's recruitment, and subsequent, job

preferences and expectations. The approach seeks to explicitly acknowledge that

recruitment is the first stage of the employment relationship (Herriot, 2002), and that

experiences which occur during recruitment prior to joining the organisation can

influence organisational socialisation (Porter, Lawler, and Hackman, 1975); and if

negative can lead to premature turnover (Wanous, 1992). However, research in this

area is only starting to emerge and indeed in 2004, Anderson et al. argued that only 5%

of published papers up to that point regarding selection took an "applicant orientated

stance" (p. 494).

This is not to suggest that the social processes approach has been totally ignored as there have been a number of research studies focusing on social processes such as attitudinal factors. This research has initially focused on selection (rather than wider recruitment issues) and in particular focusing on applicants' perceptions in testing and assessment (Searle, 2003). It has also been argued that at times the social process of recruitment has been neglected (Mathews and Redman, 1998). Examples of such research and in particular in the area of applicant perceptions will be discussed in the next section.

Despite a range of studies in this burgeoning research perspective, the social process lacks good quality research evidence (Herriot, 2004), has limited theoretical underpinning (Derous and De Witte, 2001), and therefore there remains a lack of credence given to the topic of social processes in recruitment (Ryan and Ployhart, 2000). To counter these criticisms Herriot (2002) proposed a range of psycho-social constructs such as role and self-efficacy, as well as newer innovations into theories of the self (e.g. Baumeister, 1999) and social identity theory (e.g. Tajfel and Turner, 1986) to assist the development of social process theory in recruitment. Whilst these may have applicability to the recruitment and selection arena, they have not received much exposure to these organisational settings. However, Herriot's propositions do expose some of the problems with the traditional approach such as the power imbalance, and demonstrate that the social process approach has important merits. For instance, Herriot highlights that applicants automatically accept the role of applicant and correspondingly view the recruiter as the selector, suggesting that the power lies only with the organisation through the recruiter. However, the individual seeking a job has the option of withdrawing from the recruitment relationship at any stage.

Furthermore, the perceived one-sided role of selector allows the organisation to

request and expect the provision of information, but may be unwilling to supply equivalent information. In this instance, company confidentiality is regarded as far more important that individual privacy. The organisation may appear to hold more power by the way in which they categorise the job role in question, and the competencies they expect this job holder to possess. However, the applicant may have a scarce set of skills and therefore due to market demands may be in a stronger position than the organisation. In sum, the social process approach reflects the changing nature of recruitment in a dynamic job market and explicitly acknowledges that recruitment is the beginning of the employment relationship. The approach explores the role that expectations, perceptions and attitudes have in guiding an applicant through recruitment and selection, and appreciating that both the organisation and the individual are stakeholders who share decision making 'power'. The approach has yet to gain wide spread credence for its propositions but the growing body of research is continuing to contribute to the social process approach. One expanding area within the social process approach is that of applicant perceptions.

Applicant Perceptions

One aspect of the social process approach is the consideration of applicant perceptions. These have been defined by Ryan and Ployhart (2000) as the "attitudes, affect, or cognitions an individual might have about the hiring process" (p. 566). Applicant perceptions span the range of recruitment and selection activities, including the 'recruitment', 'selection', 'orientation' and 'socialisation' (Wanous, 1992; p. 3), and in fact the social process approach views this as a continuous process from initial interest and attraction to organisational entry. Ryan and Ployhart (2000) concluded that there needs to be more research to determine perception-behaviour links in order to "confidently assert that applicant perceptions matter" (p. 602); and Anderson et al.

(2004) amongst others (e.g. LaHais, MacLane, and Schlessman, 2007) have

recommended the need to demonstrate the applicability and practicality of applicant

perceptions and reactions to employers and organisations. Recent research has

responded to this plea, and Hulsheger and Anderson (2009) have noted that the number

of publications on applicant reactions and perceptions has increased over the last five to

six years with over 70 articles published in peer reviewed journals during the period

2003-2008.

Importance of Applicant Perceptions

Several papers have provided good arguments as to the importance of applicant

perceptions (e.g. Anderson, 2004; Hausknecht, Day and Thomas, 2004; Hulsheger and

Anderson, 2009). In an earlier review, Ployhart and Ryan (1997) stated it is important

to investigate applicant perceptions because these perceptions (i.e. acquiring,

interpreting, and organising external information) affect applicant decision making,

impressions of the organisation and the individual's behaviour as a result of

experiencing selection; and therefore perceptions have an influential effect on the entire

process. Consequently, organisations cannot ignore any factors which may enhance or

detract from the recruitment process, whether it be attraction strategies (Collins and

Han, 2004), reaction to recruiters (Harris and Fink, 1987), or corporate image

(Gatewood, Gowan and Lautenschlager, 1993). Again this emphasises the importance

of the recruitment process as a social exchange where the applicant and the

employer/organisation gather and evaluate information about each other and then make

judgements as to whether to continue this fledgling relationship (Herriot, 1989;

Gilliand, 1993; Ryan and Ployhart, 2000).

Many of the supporting arguments relate to the avoidance of unwanted outcomes

associated with negative applicant perceptions or adverse reactions. As with many

psychological issues, the investigation and understanding of negative aspects are what

drives theory and research (Gable and Haidt, 2005). Similarly with applicant

perceptions, there are a number of unwanted consequences of negative perceptions

which warrant academics' and practitioners' attention. If an individual is unhappy with

the selection testing they have experienced with a particular organisation, they may

withdraw early (Schmit and Ryan, 1997) from the selection process or turn down a job

offer at a later stage (Schreurs, 2003). Given the expense of recruiting new staff,

estimated to be in the region of £4333 to £7750 (CIPD, 2007), the loss of capable and

attractive candidates would be a damaging outcome (Murphy, 1996; Chambers, 2002).

Individuals may experience a range of negative reactions including unhappiness

with selection testing because it is perceived to be unfair. Anderson (2004) proposed

that these feelings should be labelled Negative Psychological Effects (NPEs) and

questioned why so little research attention had been given to the potential negative

aspects of recruitment; especially given that by its nature recruitment means that

individuals are more likely to be rejected than selected (Murphy, 1986). If an applicant

is rejected they may well attribute this to reasons other than their own performance and

ability during selection, and look to externalise the causes. This attribution bias may

well account for why individuals blame the tests and recruiters for being unfair

(Ployhart and Harold, 2004). This blame may even lead to litigation with claims of

unfair treatment or invalid selection techniques (Smither, Reilly, Millsap, Pearlman, and

Stoffey, 1993).

Despite the rational expectation that there is a greater probability of failure than

success during selection (Anderson, 2004), individuals may detach themselves from this

explanation and over-estimate the likelihood of a positive outcome (Tversky and

Kahneman, 1974), and as such they may feel a sense of unfairness if they fail. Even if

the candidate is unsuitable for the role they have applied for, they may well discuss their

perceptions of the recruiting and selection process with other candidates (indeed ones

with more potential) and give them an unjust perspective of the organisation. This

might be extended to other people and reduce the reputation of the organisation as a

recruiter or provider of goods and/or services (Smither et al., 1993; Macan, Avedon,

Paese, and Smith, 1994). Recruitment campaigns often include hundreds if not

thousands of applicants but it would only take a few rejected individuals with a sense of

being 'mistreated' to create a potential public relations problem for an organisation

given the potential spread of influence these few individuals could have (Anderson,

2004). This would be disastrous for organisations with small recruiting pools or

organisations that have traditionally struggled to fill vacancies (Personnel Today, 2005).

In a similar vein, some researchers and organisations have begun to worry about

minority groups' reactions to particular selection methods and whether these have any

adverse impacts such as reduced performance during selection (Chan, Schmill, DeShon,

Clause and Delbridge, 1997).

Other researchers have suggested that the competition for applicants (Allen et

al., 2004), caused by possible reductions in the number of young people in the applicant

pool (Terjesen et al., 2007), means that it is important to consider all aspects of

recruitment when trying to attract and retain key talent (Anderson et al., 2004). It may

be more accurate to state that the applicant pool of young people is shrinking in

proportion to the general population's growth; even so if the recruiting pool attributes

are changing, from those traditionally preferred and experienced by recruiters, attention

to less traditional approaches may be warranted especially those that might affect how

attractive an organisation is to job seekers (Ryan and Ployhart, 2000). Certainly,

organisations would want to ensure that individuals do not embark on recruitment only

to withdraw at some later stage having caused the organisation financial costs as well as

the loss of a qualified candidate (Murphy, 1986).

Significantly, applicant perceptions are important because attitudes formed in

the initial stages of recruitment may well influence later outcomes of job satisfaction,

performance, retention, and other job perceptions (Breaugh and Starke, 2000). These

perceptions will have an impact on how successfully individuals adjust and socialise to

their new organisation, and whether they believe that their psychological contract has

been honoured or violated (Breaugh and Starke, 2000).

All in all, there is concern that applicant perceptions influence and individual's

perceptions about a given organisation, their decision making regarding that

organisation, and behaviour towards that organisation (not just in terms of a job, but

also the services it provides and the perspective they choose to share with others about

their experiences with the organisation). Hulsheger and Anderson (2009) in their recent

editorial for the International Journal of Selection and Assessment (IJSA) reiterated the

importance of applicant perceptions. If these attitudes, perceptions and reactions are

better understood the organisation may be able to influence them in their favour and

select the most desirable candidates, whilst still maintaining its reputation with

unsuccessful applicants and other individuals (Ryan and Ployhart, 2000). Now that

importance of applicant perceptions as a psychological process has been introduced, it is

important to delve a little deeper into types of perceptions experienced by applicants

and the related research effort.

Types of Applicant Perceptions

It has been argued that recruitment and selection are social processes, involving

the interaction of two parties (Anderson, Born, and Cunningham-Snell, 2001). Part of

this process will be the psychological evaluations (consciously and unconsciously)

made by the job seeker/applicant towards various aspects of the process; ranging from initial job searching to entering the organisation (Wanous, 1992). What causes these perceptions and the possible outcomes of these perceptions has attracted recent research interest across recruitment and selection. However, this research has in the past lacked a coherent theoretical framework, failing to show the interactions between different antecedents and consequences (Lievens et al., 2002).

Applicant perceptions research falls into three main categories, a) *attraction perceptions* research including information and recruitment source perceptions, familiarity and realistic job preview perceptions, organisational image perceptions, and job characteristics perceptions; b) *selection perceptions* research including selection and testing perceptions, recruiter perceptions; and c) *outcome perceptions* research including job acceptance intentions and pre-entry socialisation. The vast majority of the research regarding applicant reactions and perceptions has been related to reactions to selection methods (Hulsheger and Anderson, 2009). As mentioned earlier there has been a surge in interest in applicant perceptions research since 2004; for example, fairness reactions (e.g. Anderson and Witvliet, 2008; Truxillo, Campion, Bauer and Paronto, 2006). For completeness, research from each of the three areas will be introduced, although the current study will only investigate some of applicant perceptions topics related to attraction (recruitment sources, familiarity, organisational image and job characteristics) and outcomes (job acceptance intentions) rather than areas related to selection and pre-entry socialisation.

Figure 6 depicts the eight different types of applicant perceptions research by way of a useful reference. The figure shows the range and potential complexity related to applicant perceptions although it should be noted that research tends to focus on only a limited number of applicant perceptions in any one study. Indeed Breaugh and Starke

(2000) concluded that "an appreciation of the complexity of the recruitment process

(i.e., the number of variables involved and the nature of their relationships)" (p. 405)

was absent from recruitment research.
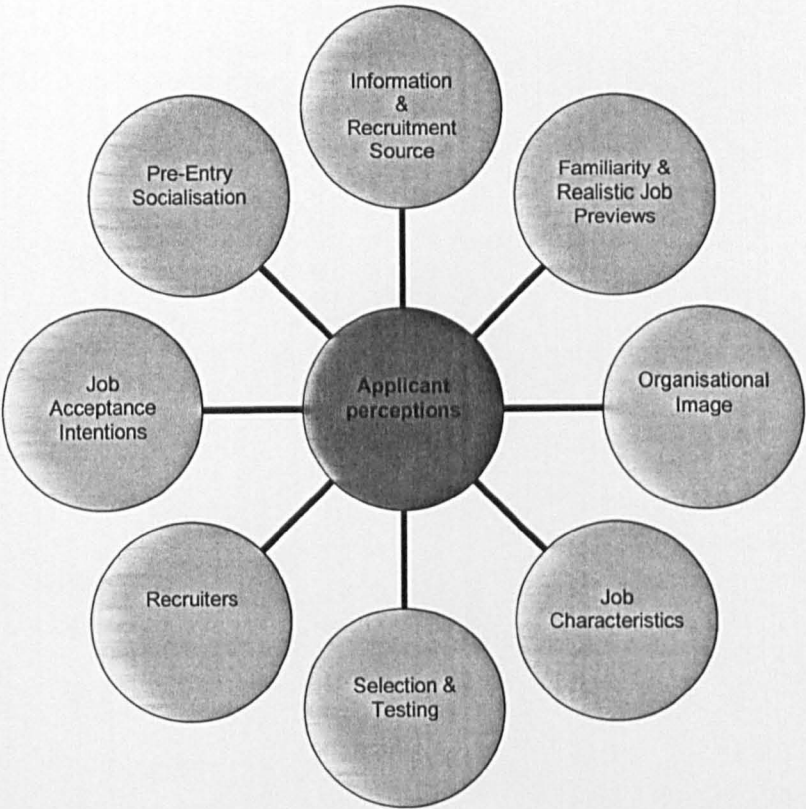
Figure 6: **Different Types of Applicant Perceptions.** This figure depicts the eight different types of applicant perception across the lifespan of recruitment, selection and pre-entry activities.

Information and recruitment source perceptions. It is evident that clear

information which is derived from a respected recruitment source (even informal ones)

is influential to applicants. Maurer, Howe and Lee (1992) concluded that inadequate

information could lead to a reduction in job offer acceptance; and Barber and Roehling

(1993) found those with more job information perceived an organisation to be more

attractive than those with limited information. This may be because the organisation's

reputation and attributes are believed to be conveyed to applicants via recruitment

sources; and so incomplete information may reflect poorly on the organisation (Barber

and Roehling, 1993). Alternatively, this may add enough ambiguity for applicants to decide to avoid the information because it does not aid their decision making (Highhouse and Hause, 1995).

Research has found that recruitment sources can influence an individual to apply to an organisation for a job, although in 1981 Herriot and Rothwell stated that the particular features which were significant were not yet determined. Research since then has tried to understand these features. Rynes, Bretz and Gerhart (1991) found participants were particularly positive about site visits as part of the recruitment process; which was later supported by Boswell, Roehling, LePine and Moynihan (2003). Ryan, Horvath and Kriska (2005) found that individuals interested in a given job indicated that the level of information contained in recruitment sources was important. This was linked to the importance of maintaining applicant interest during the recruitment process (Barber, 1998); although this has been a relatively neglected research topic. Different recruitment sources have been found to relate to different outcomes, for instance that some sources are more accurate than others (Rynes, 1991) or more realistic (Moser, 2005). That said, in the absence of accessible information applicants may 'fill in the gaps and make inferences about an organisation (Ehrhart and Ziegert, 2005).

Familiarity and realistic job preview perceptions. Breaugh and Starke (2000) proposed that employee referrals helped applicants become more informed about a given job, as opposed to general job adverts (Williams, Labig and Stone, 1993); although work on realistic job previews (RJPs) influence has been mixed. RJPs were described by Phillips (1998) as "the presentation by an organization of both favorable and unfavorable job-related information to job candidates" (p. 673). Early work by Wanous (1973) found that RJPs were not significant in influencing job offer acceptance; however, they did lower job expectations in areas such as fairness of pay, working

conditions, beliefs about accomplishments and praise, job stability, and as such reduce

the likelihood of early turnover. In this sense the RJPs were giving applicants a more

realistic representation and outlook on their job and the organisation, than might be

offered by recruitment literature which might only seek to present the positive aspects

of the job and organisation.

Arguably RJPs will be more honest and therefore inevitably include negative or

less positive aspects. Armed with this information an applicant may still accept a job

but they are less likely to be disappointed when the job is not as 'rosy' as expected.

Therefore in a meta-analysis of RJP research, Phillips (1998) concluded that RJPs did

indeed have a positive effect especially in relation to lowering exit from the recruitment

process, and worked best when they lowered expectations. The practical application of

understanding the influence of RJPs relates to job satisfaction and reducing turnover. If

RJPs ensure applicants have realistic expectations of their prospective jobs it is

proposed that they will be happier in the job (Wanous, 1980); or as Dugoni and Ilgen

(1981) suggested, they aid individuals to cope with their new job.

Organisational image perceptions. One area of applicant perceptions

receiving attention is organisational image, which relates to how the organisation,

company or firm is perceived by individuals, that is, the public opinion and social status

of an organisation, akin to reputation. Gatewood et al. (1993) concluded that

organisational image was a function of the information available at any one given time,

and was influenced by personal interaction through information the organisation

conveyed. In this sense organisational image is an applicant perception and also a

possible antecedent of other applicant perceptions.

Collins and Han (2004) conducted a large scale survey of organisations which

recruited college graduates and found that organisations' reputation and image,

projected through corporate advertising, impacted on the applicant pool quality and

quantity. This advertising increased both customers' and potential applicants' positive

regard for the organisation and increased awareness and familiarity; the latter issue

being significant as applicants have been found to be more attracted to organisations

they were familiar with (Gatewood et al., 1993). This attraction and high regard can be

achieved through, what Collins and Han (2004) called low and high involvement

recruitment practices. Low involvement requires little effort on the part of the job

seeker, and they may be exposed to recruitment information even though they were not

actively looking. This type of practice would include general advertisements for the

organisation but not for particular jobs; but effectively alerts a wide audience to the

opportunities in that organisation. As aforementioned this raises the applicant pool's

awareness of the organisation and the more familiar they are the greater the likelihood

of that organisation being attractive over another; vital if an organisation is going to as

Collins and Han (2004) state "gain a competitive advantage in the war for talent" (p.

710). The alternative high involvement recruitment practice is more structured and

targeted, with advertisements for specific positions.

Rynes and Boudreau (1986) found that when trying to attract applicants through

specific job advertisements, some organisations provided detailed company information

to increase the job seekers' awareness of their attributes, thereby improving their

organisational image. Gatewood et al. (1993) investigated the importance of corporate

and recruitment image on career decision making, particularly early job choice

decisions and argued that the job choice process begins with a job seeker's appraisal of

recruitment material, some of which will help them form an impression of the

organisation and determine its reputation. They substantiated Rynes' (1991) earlier

assertions about the significance of "initial impressions of organizations as employers"

(p. 423), and positive images of an organisation influencing job seekers to see that

organisation as an attractive proposition.

Turban (2001) found that initial impressions of an organisation as employer

were good predictors of future applicant attraction; which was subsequently associated

with deciding to accept a job offer (Powell, 1991). Organisational image is particularly

significant for organisations which rely on how they are portrayed, such as public sector

organisations (Luoma-aho, 2007). These organisations have a different "raison d'etre"

(Luoma-aho, 2007; p. 125) providing services rather than selling products, and are

funded by tax payers' money; and so aspire to be positively perceived by others. This is

no less the case for military and civil defence organisations that may at times have roles

which are at odds with public opinion (Newton and Norris, 1999).

One developed theory of organisational image is Lievens and Highhouse's

(2003) Instrumental-Symbolic model in which they adapted and applied a social and

consumer psychology framework to the field of recruitment. Their theory has been one

of the more recent attempts to demonstrate the importance and utility of applicant

perceptions in the recruitment process. Lievens and Highhouse recognised that

individuals were more likely to be drawn to organisations with which they held a

positive image (Gatewood et al., 1993) and familiarity with this organisation was a

likely source of this attraction (Turban, 2001). They also recognised that previous

research into organisational image was not based on a theoretical framework and sought

to better understand the antecedents and components of organisational image. Their

framework has two elements: instrumental and symbolic organisational image.

Instrumental job/organisational aspects are concrete and tangible; an organisation either

has them or not. These may include: pay and conditions, promotion opportunities,

leisure facilities, hierarchical structure etc. Symbolic aspects, alternatively, are less

tangible and are related to the applicant's perceptions. Here an applicant might assign a

trait and image inference to the organisation such as 'it's a caring organisation', or 'it's

a trendy organisation'. Lievens and Highhouse hypothesised that instrumental factors

are insufficient to explain why an applicant is attracted to an organisation, and that

symbolic inferences are equally valid and significant.

There has been some research to support instrumental factors; earlier work by

Cable and Graham (2000) supported the importance of organisational issues such as

pay, organisational culture and career opportunities. Whilst Slaughter, Mohr, Zickar

and Highhouse's (2004) later work supported symbolic aspects when they found that

applicants described organisations in personality-like terms. Lievens and Highhouse

themselves found that prospective bank employees did assign "trait inferences" (p. 95)

to the banks that they were applying to, in addition to job and organisational factors

(along the lines of Cable and Graham, 2000). Traits such as 'innovativeness' and

'competence', identified with by applicants participants, explained variance in how they

viewed organisational attractiveness; and also differentiated between the prospective

organisations. In relation to the practicality of their findings, Lievens and Highhouse

argued that organisations could 'audit' their image against that of competitors, as well

as identify the symbolic traits that differentiated them from other companies. This was

particularly useful if the companies were essentially the same, with regard to job and

organisational factors, and so could highlight the symbolic traits as part of their

recruitment strategy. Research on organisational attractiveness waned from 2005

onwards, although recently Tsai and Yang (2010) confirmed that various aspects of

organisational image were important antecedents to organizational attractiveness.

Job characteristics perceptions. Another form of applicant perceptions is the

topic of job characteristics including job expectations and preferences. In their review

of recruitment research Breaugh and Starke (2000) adapted their earlier model to

describe how job expectations influence employee attitudes and behaviour; these

included job information and the applicant's impression of the organisation. Wanous

(e.g. 1992) has conducted extensive research on job expectations and whether these

have been met post-hire, and how these might affect an individual's job satisfaction,

their job performance and turnover intentions for instance. Much of the research on job

expectations and preferences relates to job recruits and whether their expectations have

been met; for instance, if those recruited through internal recruitment sources are more

or less likely to have their job expectations met (Moser, 2005).

Less research relates to the actual job characteristics of applicants during the

recruitment process; although it was noted by Powell (1984) that applicants do express

preferences for particular job characteristics and these have an impact on decision

making. Turban, Eyring and Campion (1993) found that the job preferences that

applicants regarded as important to accept a job offer were not necessarily the same as

those influencing a decision to reject a job. For instance, individuals stated that the type

of work was important in accepting a job but location was a reason to reject a job. They

noted much research on preferences was actually about organisational preferences not

job preferences, that is, job attributes (e.g. Harris and Fink, 1987). One study did look

at a specific set of preferences, that is the investigation of the influence of pay

preferences on recruitment decisions and found perhaps unsurprisingly higher levels of

pay and a range of flexible pay options were attractive (Cable and Judge, 1994).

Selection and testing perceptions. The largest area of research in this field is

related to selection and testing perceptions, and indeed there have been a number of

reviews which outline previous research (e.g. Hough and Oswald, 2000; Breaugh and

Starke, 2000; Breaugh, 2008). A comprehensive review of 'applicant perceptions of

selection procedures and decisions' is also provided by Ployhart and Ryan (1997) who presented a list of the range of perceptions measured by different studies, which can be organised into three categories: fairness/organisational justice, validity/relevance/relatedness, and general test perceptions. Their review demonstrated the wealth of research in the area, and the development of new theoretical frameworks such as Gilliland's (1995) organisational justice model. The review also demonstrated that perceptions are caused by the way individuals are treated or perceived to be treated (Thorsteinson and Ryan, 1997), their preferences during selection (Macan et al; 1994), and that perceptions have attitudinal and behaviour outcomes (Ployhart and Ryan, 1997). More recent reviews have focused on the importance of applicant reactions to selection and testing (e.g. Hausknecht et al., 2004; Hulsheger and Anderson, 2009); although Ryan and Huth (2008) concluded that research does not yet provide the level of detail to be truly practical.

In terms of individual research, Gilliland (1993) put forward a model of fairness in selection which brought together the range of evidence regarding organisational justice theory and reactions to selection. His model proposed ten rules underpinning applicant reactions to procedural justice (i.e. the fairness of the process), some of which included feedback, selection information, honesty and two way communication, factors which might impact on how fairly an applicant views selection and ultimately the organisation they are applying to join. Further research was conducted on procedural fairness by Thorsteinson and Ryan (1997) in their laboratory setting to test the effects of selection ratio (i.e. the relative difficulty of the selection process) and the effect of selection outcomes. They found that the selection ratio had no effect on perceptions but those individuals who received a job offer had higher levels of distributive fairness about their outcome. Their research suggested that applicant outcome expectations

were more significant than their perceptions of how difficult the recruitment process was, and these expectations affected how fair they believed the selection decision to be.

Derous and De Witte (2001) proposed a social approach which bridges the traditional and social process models (Anderson, 2004), in which they described selection as a "task that is undertaken by different stakeholders ... and characterized by product, procedural and process characteristics" (p. 322). Their model aimed to demonstrate the interplay of each element of product, procedural and process as well as emphasise communication in selection. They took their initial model and combined it with Schuler's (1993) social acceptability work and Gilliland's (1995) social justice and fairness theory. The resultant Social Process model on Selection (SPS) outlined eight characteristics of selection aimed at describing applicants' expectations of and reactions to selection including information available to the candidate, candidate control, candidate assertiveness, transparency of the testing process, appropriate data gathering by recruiters, feedback, objective selection, and human treatment of candidates.

Their model was designed to describe the range of general applicants' attitudes to selection procedures and therefore aimed to encapsulate factors important to applicants prior to being hired. In this way their model differed from Schuler and Gilliland who focuses on applicant perceptions to specific events, that is, perceptions of fairness with given selection tests. At the time of their model they argued that there was limited evidence to support the SPS propositions, nevertheless there was related evidence in particular associated with the transparency of testing (e.g. Gilliland, 1995). Derous and De Witte proposed that there needed to be further research in the area of applicants' test motivation, and indeed Sanchez, Truxillo and Bauer (2000) developed an 'expectancy-based measure of test-taking motivation' although they found limited correlation between testing taking motivation and actual test performance. In 2003,

Derous, De Witte and Stroobants presented an expert analysis of the SPS model. They

found support for six of the model's characteristics and presented a revised version

which subsumed several previously distinct categories.

Recent research by Gamliel and Peer (2009) investigated the effect of framing

on applicants' reactions to selection methods and whether individuals would perceive

such measures to be fair as a result of information they were provided with prior to

selection. This research thus considered the impact of fairness heuristic theory in

forming perceptions to selection. Gamliel and Peer found that contextual variables

affected applicants' reactions resulting in a favourable regard for the selection process

when it was framed positively as opposed to negatively by researchers (e.g. discussing

selection in terms of its purpose was to accept individuals rather than reject them).

Recruiter perceptions. Other research has focused on different possible

antecedents such as 'recruiter issues' (Goldberg, 2003), and their consequences. Often

research has been related to the effect recruiters might have on applicants such as

influencing job decisions, although there have been mixed results. Powell (1984) failed

to link recruiter behaviour and job acceptance behaviour and concluded that the

influence of recruiters was perhaps overstated. However, Harris and Fink (1987) found

that, in addition to perceptions about job and organisational factors, recruiters directly

influenced applicant intentions to take up a job. This was also concluded by Turban,

Forret and Hendrickson (1998).

With regard to the impact of recruiter characteristics and attributes, Harris and

Fink (1987) found no significant gender influence on applicants. This was confirmed

by Goldberg (2003) although she found race/ethnicity to be influential. These, and

similar findings, led Avery and McKay (2006) to cautiously propose that in general

recruiters' background has little impact except perhaps for minorities or females who

may view certain recruiter demographics as reflecting the organisation's diversity

policy. One way recruiters can be influential is through the information they transmit to

the applicant, as they are a major source of job and organisational information and

perhaps the only point of contact the applicant has with a company. Rynes and

Boudreau (1986) regarded recruiters as "symbolic" (p. 735) of the organisation, who

acted as gatekeepers. Indeed, Harris and Fink (1987), and Rynes and Miller (1983)

found recruiters' informativeness was an important characteristic in influencing

applicant perceptions. Recently, research by Carless and Wintle (2007) concluded that

the characteristics of interviewers had both direct and indirect effects on how attracted

an applicant was to an organisation and job, and whether they intended to accept a job

offer.

Job acceptance perceptions. Research has also considered the impact of

applicant perceptions on job acceptance decisions and intentions to take up a job offer if

successful during selection. Macan et al. (1994) argued that as selection is a "social

relationship between the applicant and employer" (p. 717), then an applicant's intention

to accept a job offer indicates their desire to continue this social relationship. Several

researchers have found a number of aspects which are related to job acceptance

intentions. These have included applicant reactions to testing such as cognitive ability

tests and assessment centres (Macan et al., 1994), although these procedures did not

have a major role in decision making. Rynes and Miller (1983) found that, perhaps

unsurprisingly, the availability of job alternatives moderated job acceptance intentions;

and significantly Liden and Parsons (1986) found that even if an applicant had negative

perceptions of the selection procedure they would accept a job offer if they had few

employment alternatives. This is interesting given that a positive organisational image

attracts applicants (Lievens and Highhouse, 2003) and in some cases applicants may

rely on or glean much of their perception about an organisation from the selection

process (Macan et al., 1994).

Finally, Harris and Fink (1987) found that recruiter characteristics were

significantly related to job acceptance intentions and although their research reflected

Rynes and Miller (1983) in that recruiters characteristics of 'personableness' and

'informativeness' were important, their general findings were contrary to Rynes and

Miller's research. Carless and Wintle's (2007) research also linked interviewer

characteristics with job acceptance intentions. However, as already stated, recruiter

characteristics were found in some studies not to have an effect on job acceptance

intentions (Rynes and Miller, 1983). Furthermore, Liden and Parsons (1986) concluded

that recruiter gender was not related to job acceptance intentions. Powell (1984) found

that recruitment procedures did not predict job intentions; and Wanous (1973)

concluded that RJPs whilst lower job expectations they did not deter individuals from

accepting a job offer.

It was proposed by Turban et al. (1993) that there needs to be further research on

whether job attributes can predict job acceptance, especially as they determined that

there was a difference in the job preferences of those individuals in their study who

accepted a job offer and those that did not. Further studies have more definitively

investigated job acceptance predictors. The impact of selection procedures and recruiter

behaviour on job acceptance decisions has received mixed support but better predictors

for job acceptance are perceptions of the job on offer and the employing organisation

(Macan et al., 1994). This mirrors earlier research by Feldman and Arnold (1978) who

found that job choice was influenced by job and organisational attractiveness. Turban,

Forret, and Hendrickson (1998) established that how individuals perceive an

organisation early in the recruitment process influences their later decision making such

as whether to accept a job offer (Powell, 1991).

Pre-entry socialisation perceptions. As well the expectations and beliefs that applicants have towards recruitment and testing processes, researchers have taken the social process concept further to argue that it contributes to socialisation and the route of entry into an organisation (Wanous, 1992). Pre-entry experiences also influence socialisation into work and organisational life (Porter, Lawler, and Hackman, 1975). This is not surprising given that social processes focus on the two-way relationship between the organisation and the individual (Herriot, 1989). Anderson and Ostroff (1997) argued that "selection and socialisation [are] often seen as distinct with little overlap or synergy" (p. 413) when in fact they are part of the same psychological process of 'newcomer integration'. They view selection and socialisation as having the same underpinning motive of "identifying and integrating effective organisational members" (p. 413).

Herriot (2001) described this as "the first episode in the employment relationship" (p. 385); something Garavan and Morley (1997) referred to it as "anticipatory socialisation" (p. 119). Anderson (2001) argued that selection will undoubtedly leave an impression on those undertaking the process not just because they are being assessed but because they are gathering job information and are likely to be "influenced by these [selection] experiences in a number of longer term ways" (p. 84). Wanous (1992) proposed four phases of organisational entry, two of which: recruitment – the process of mutual attraction, and selection – the process of mutual choice, occur prior to day one of a job. In this scenario, pre-entry socialisation is where expectations and the psychological contract are formed (Rousseau, 1990); and both the applicant and organisation make decisions and judgements about each other (Lester, Claire and Kickul, 2001). Therefore recruitment and selection are as much about the organisation

leaving the applicant with a good impression, as the applicant ensuring they have

suitably impressed the selectors representing the organisation. Furthermore, it has been

argued that recruitment and selection experiences have long term consequences not just

to the person-job fit or person-organisation fit (Carless, 2005) but to the job satisfaction,

retention and performance of the new recruit (Herriot, 2002); and so ensuring that this

element of the social process is understood has both short term and long term impact.

Anderson and Ostroff (1997) argued that selection techniques act as facilitators

of pre-entry socialisation, that is, they have 'socialisation impact'. There are several

different processes or activities that occur during this pre-entry socialisation, some

related to how the organisation is perceived (passive processes) and some to how the

applicant organises this information (active processes). In terms of how the

organisation operates, its public relations are put to the test, as the experiences of the

applicant during selection will have a long term impact on their perceptions of the

organisation they have applied to join (Anderson, 2001). Similarly, the culture and

management style of the organisation will be conveyed to the applicant through the

selection processes and the selectors (Anderson, 2001). The final passive experience for

the applicant is 'longitudinality' where the longer an individual is in the selection

process, arguably the more socialised they will become (Wanous, 1992). In terms of

more active processes, the applicant will perform information acquisition activities as

they need new information on which to make decisions (Major and Kozlowski, 1997)

and on which their psychological contract, expectations and aspirations will begin to be

formed, as well as a decision about their person-culture fit (Schneider, 1987). These

propositions have received some empirical validation. Scholaris, Lockyer, and Johnson

(2003) confirmed that Garavan and Morley's (1997) concept of anticipatory

socialisation happens during the recruitment and selection process. More recently Taris,

Feij and Capel (2006) confirmed that unmet expectations formed prior to joining an

organisation can have negative effects such as lower motivation and turnover.

However, their research raised interesting questions regarding the relative importance

assigned to work aspects which are or are not met, as well as the strength of

expectations over time.

Present Study

Rationale

The objective of this research was to inform RAF recruitment policy and

delivery by offering practical recommendations based on an investigation of

individuals' reasons to apply to join the RAF[7] (i.e. their job preferences and

expectations); and how the organisation is viewed by applicants (i.e. their organisational

image perceptions). It was decided to expand this research to measure what might

influence these perceptions, in particular, recruitment sources and familiarity; as well as

measure subsequent outcomes such as attractiveness of the organisation and job-related

decision making (i.e. job acceptance intentions). Rationale for this approach was three

fold. Firstly, the sponsor for the work was particularly interested in wider recruitment

issues not those related to testing and assessment, as similar research has already been

commissioned. Secondly, the majority of applicant perceptions research has been

within the field of selection and testing rather than wider recruitment issues (Anderson

et al., 2001) and so this provided an opportunity for new research avenues. Thirdly and

finally, perception research has produced mixed results as to the impact on applicants'

decision making, such as job acceptance; and therefore it was decided to test these

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[7] A distinction is made here between 'motivations to apply to join', and 'motivations for joining', as the

former phrase better describes applicants who are in the process of applying but have not yet received a

job offer or rejection.

premises in a new environment.

Given the opportunity to conduct research with a large number of RAF

applicants, it was decided to capture their responses using a quantitative questionnaire.

A two phase study was designed to achieve this. The first qualitative phase was

designed to explore reasons for applying to the RAF in order to develop questionnaire

items. The second quantitative phase was designed to measure several different

applicant perceptions including organisational image and job acceptance intentions.

RAF Recruitment

The RAF recruits several thousand individuals each year for a range of

roles/specialism as opposed to specific jobs. Individuals apply for, and are assessed and

selected for a specialism, for example, pilot, air traffic controller, nurse, administrator,

weapons technician. Individuals must also decide the level of entry they wish to apply

for. There are four categories of entry with the main two being officers and

airmen/airwomen (other ranks)[8]. These entry levels have different academic

requirements (for instance, graduates would generally by expected to apply to be an

officer) and other requirements such as leadership potential. There are also nationality,

residency, age and fitness requirements, plus different technical aptitudes according to

each specialism. The officers and other ranks selection process differ.

The officers are selected at one location called the Officer and Aircrew Selection

Centre (OASC) which involves a three day assessment centre where aptitude, physical

fitness, leadership potential and ability to succeed with further training are assessed.

Other rank applicants are selected at one of the forty-one Armed Force Careers Offices

(AFCOs) within the UK. The main basis of their selection is an interview and the

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[8] RAF jobs fall into one of four groups – Officers, Non-Commissioned Aircrew and Non-Commissioned

Air Traffic Controllers , Airmen/Airwomen and the RAF Regiment.

Airman/Airwoman Selection Test (AST) which consists of seven multiple-choice tests

each focusing on different skills, such as verbal reasoning, spatial reasonsing and

mechanical comprehension. Although individuals apply for their preferred specialism

they may receive aptitude or AST scores which are better suited to an alternative role.

Furthermore, the number of training slots available within each specialism varies and so

an applicant may be asked to accept an offer in a different specialism because there are

available slots.

Phase One: Qualitative Component

The qualitative study set out to explore individuals' reasons to apply to join the

RAF, thereby providing evidence to answer a crucial question for the sponsor of the

research, and importantly to assist the design of questionnaire items. Unsurprisingly,

recruitment specialists within the RAF have a clear notion of why young people want to

join the organisation and these range from sport, to career, to adventure. These

perceptions have been accrued over time but represent a traditional and enduring

perspective. This is not to state that this perspective is erroneous, but it may have

neglected other factors which may have also been of influence.

The literature provides guidance for the design of items related to applicant

perception including extensive applicant perception research with the Belgian military

(e.g. Schreurs and Lescreve, 2001; Derous, Schreurs and Andriessen, 2004; Lievens,

van Hoye and Schreurs, 2005). However, it was decided that bespoke items were likely

to be required given cultural and organisational differences between this research and

that already conducted. Furthermore, concerns have been expressed by researchers such

as Breaugh (1992) that studies often provide a fixed list of job factors generated not by

the applicants themselves but by the researchers. Therefore to overcome this difficulty

a qualitative study was designed.

Whilst the qualitative phase was designed to identify key perceptions in order to generate questionnaire items, it was decided to opt for an exploratory approach. An interviewing technique was chosen to facilitate the identification of key reasons to join but also to elicit the underlying values of these factors in order to better understand how applicants "construe reality" (Rynes et al., 1991, p. 490). It should be noted that the determination of underlying values was not required by the sponsor or necessary for the questionnaire design; however, the qualitative phase provided an opportunity to conduct probing interviews and gather additional data which might further contribute to understanding social processes in recruitment.

Method

Participants

Thirty-seven participants who were applying for or who had recently joined[9] the RAF were included in the qualitative study. Applicants were candidates who had completed selection testing but had not yet received a job offer decision. Recruits were new entrants into the RAF who were undergoing initial training and were all within their first eight weeks of service. The latter group were used to increase the number of participants available for the qualitative study, and because it was decided that they would be readily able to recollect their reasons for applying to join the RAF adequate for this exploratory phase. It should be noted, however, that the quantitative phase included only applicants as to address concerns regarding the use of recruits to determine applicant perceptions (e.g. Breaugh and Starke, 2000).

Procedure

The qualitative study utilised laddering interviews to elicit motivations to apply

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[9] Recent recruits were used for their similarity to applicants (having recently applied to the RAF) and because access to these individuals was possible.

to the RAF. In order to explore applicant reasons to join, interviews were conducted

using a laddering technique. This approach was based on Means-End Chain (MEC)

hierarchical theory (Gutman, 1997), favoured in market and consumer research (e.g.

Wansink, 2003), which contends that people's rationale for making decisions or

behaving in a certain manner, for instance, buying one type of breakfast cereal in

preference to another, is because of underlying personal values. These values, however,

may not be easily accessible during standard interviews and indeed the participant may

not be conscious of what 'drives' them to make a particular choice. The researcher tries

to determine 'root' consequences and values associated with product attributes. These

values provide a better understanding of an individual's choices and decision making.

MEC hierarchical theory proposes three elements: *attributes*, that is, the physical

properties of the 'product'; *consequences*, that is, the outcomes associated with the

'product'; and *values*, that is, the associations between consequences and personal

values systems. To this end there may be deep emotional reasons to explain why

someone behaves in the way they do which are not immediately obvious and which are

not elicited by asking direct questions. To utilise the concepts from MEC hierarchical

theory (Gutman, 1997) the qualitative phase employed laddering style interviews

(Reynolds and Gutman, 1998) used in market and consumer research (e.g. Wansink,

2003). Laddering interviews are used to uncover associations and hidden motives by

asking a string of tailored questions related to each response a participant gives; in

doing so the researcher can elicit a network or ladder of connected responses. These

responses typically follow the pattern, from initial answer, across *attributes*,

consequences and *values*. *Attributes* only scratch the surface – they sound right but they

reveal little of the real motivations behind a decision or behaviour. They may

accurately represent or describe a 'product' but are rarely the actual reason for choosing

a product or service. If only attributes are discussed, the real reasons for actions are not uncovered and also subsequent decisions made on that information, for instance an advertising campaign, may be erroneous. *Consequences* start to give the reasoning for action and become more emotional and tend to have more abstract qualities. Finally, *values* are often emotional because they represent deeper seated value systems.

Laddering technique can take several forms, for instance, Kelly's (1955) triadic sorting used in repertory grid interviews. In this research the method involved asking for five reasons for applying to the organisation (the RAF) and then asking laddering questions to determine the importance, to the participants, of such factors and the subsequent responses given. Surprisingly, whilst values are not always immediately obvious, it does not necessarily take very long to access core values and beliefs.

The one on one laddering interviews were conducted in private conditions. Each participant was provided with a summary of the research aims and contact details for future reference (Appendix D). All participants were assured of confidentiality and asked to sign a research consent form (Appendix E). All participants were given the opportunity to decline to take part[10]. Each participant was asked to write down, on separate cards, up to five reasons why they applied to join the RAF. The cards were then used as prompts and each participant was asked why each factor was important to them as a reason to apply; for example, "why was sport an important reason to apply to join the RAF?". Once the participant gave a response they were then asked why this response was important to them. The significance of each response was challenged until the participant could provide no more reasons; which is known as 'topping out'. Each interview lasted for approximately 45 minutes. The approach used is detailed at Appendix F. Comprehensive notes were made during each interview using a response

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[10] The original sample included forty individuals but three individuals declined to take part.

form specially designed to capture laddering information (Appendix G) as no recording

forms were explicitly specified in Reynolds and Gutman's (1988) guide to MEC

laddering. These were transcribed onto a word processing package for coding, scoring

and analysis.

Data Analysis

The interview data was analysed according to the approach advocated by

Gutman (1997) when using laddering interviews underpinned by MEC hierarchical

theory. One outcome of the laddering interview technique is to produce a Hierarchical

Value Map (HVM). This is a tree diagram which presents the information gathered

during the laddering interview. The HVM ultimately depicts the underlying personal

value (and the ladder of associations that led the individual there) which underpin

various attributes and consequences, and the relationships between these. The analysis

included several stages which first involved constructing ladders for each respondent

based on their interview responses. For the majority of participants, five ladders were

constructed, one for each factor/reason to join. Some ladders were very short but on

average each ladder consisted of five 'rungs'. Each interview comment was assigned to

one of the three hierarchical levels: attribute (A), that is, a basic factor; consequence

(C), that is, a basic reason; or value (V), that is, an underlying motive.

Consistent with MEC practice, to ensure the reliability of these ladder codes, a

second rater also coded each interview ladder (Ryan and Bernard, 2003). This rater was

given definitions of an attribute, a consequence and a value; and 92% agreement was

achieved for the 746 individual comments, which is very good given the subjectivity

and latitude possible in determining whether a comment should be an attribute, a

consequence or a value (Grunert, Beckman and Sorensen, 2001). The percentage of

agreement method is often used in MEC research (e.g. Klenosky, Gengler, and Mulvey,

1993), however the Cohen's Kappa was also calculated to counter issues of chance; Kappa = .809 (p > 0.001). This high level of agreement may have been made a result of the semi-structured nature of the interviews and the relatively curt responses provided by the participants. In addition, the attributes were very straightforward to categorise as these were the factors which the participants wrote on their card; consequences and values therefore were present further up the ladder. However, not all ladders resulted in a value, and this was where most differences in rating occurred. Differences were discussed and in some cases were a result of the absence of some contextual information important in analysing laddering interviews (Reynolds and Gutman, 1988); after which a mutually agreed code was assigned. Further information on the inter-rater reliability is presented in Appendix H.

The comments were then coded into an initial coding framework which consisted of 28 attributes, 54 consequences, and 14 values (a total of 96 qualitative codes). At this stage, these codes were quite specific and many factors identified here were used to inform the questionnaire development. A second less refined coding framework was then compiled by aggregating these detailed comment categories for the purpose of creating a HVM. So for instance, the individual categories of 'mental stimulation', 'not 9-5/routine', 'daily routine' were collapsed into a more generic code of *'avoid boredom'*. Again this reduced coding framework was verified by another rater and this time 98% agreement was achieved (Kappa = .95; p > 0.001). It is important to note that when creating a HVM it is the *connections* that are key *not* the individual elements (i.e. the attributes, consequences and values). Therefore, in order to reduce the number of comments and present meaningful connections (if there are too many individual codes, it is difficult to find significant connections) the total comments were reduced to 34: 10 attributes, 16 consequences and 8 values. These comments categories

are presented at Table 9, and are categorised according to their hierarchical level of

ACV.

Table 9

Aggregate Comment Categories From Laddering Interviews

Code	Category	Frequency
Attributes		
01	Career orientated	34
02	Travel	18
03	Military lifestyle	15
04	Pay, remuneration and benefits	9
05	Sport & adventurous training	9
06	Family and friends	8
07	Military service	12
08	Job related	16
09	Experiences and opportunities	33
10	Personal development	18
Consequences		
11	Meeting and being with people	34
12	Enjoyment	21
13	Putting effort in	14
14	Financial security and benefits	18
15	Progression and promotion	19
16	Physical pursuits	17
17	Contribution to wider issues and the	36
18	Variety	58
19	Push self and reach potential	55
20	Avoid boredom	32
21	RAF related	20
22	Job security	52
23	Training and development	18
24	Flying	5
25	Opportunities	27
26	Personal growth	25
Values		
27	Well-being	21
28	Achievement	23
29	Sense of purpose	26
30	Stimulation	14
31	Job satisfaction	6
32	Affiliation	18
33	Independence	8
34	Learning	7

Note: N=37. The table presents the aggregated comment categories for each laddering

'layer': attributes, consequences and values. A total of 96 comment categories were

aggregated to form 34 new comment categories.

Before a HVM could be constructed, these comments categories were placed

into an Implication Matrix which displays the number of incidences each comment

category lead to another comment category (Reynolds and Gutman, 1998). The

Implication Matrix therefore included all 34 of the ACV comment categories from the

second framework; and so a matrix of 34x34 different interactions was constructed.

These connections were either a direct relation (DR) that is where an element directly

connected to another element; or an indirect relation (IR) that is where an element

indirectly connected to another. To illustrate, a ladder might include the following

elements: Lifestyle → variety → putting effort in → opportunities → stimulation.

Therefore the attribute lifestyle directly links to the consequence variety (a DR) but

indirectly links to the consequences of putting effort in and opportunities, and the value

stimulation (IRs). In comparison the consequence of opportunities is directly linked to

the value of stimulation etc. A summarised Implication Matrix is displayed as Table 10.

The DRs and IRs were recorded separately for completeness. For example, a fractional

expression of 1.4 (as per Reynolds and Gutman, 1988) indicates 1 DR and 4 IRs

between the attribute 'career orientated' (1001) and the consequence 'financial security

and benefits' (1014). As advocated by Gutman (1987), for transfer to the HVM,

aggregates of the DRs and IRs were used; so the previous example, there were five total

connections (1.4=5) between the attribute 'career orientated' (1001) and the

consequence 'financial security and benefits' (1014).

The Implication Matrix can contain many empty cells (Reynolds and Gutman,

1988) and also limited associations; although these are useful in understanding where

the main connections are. As can be seen from the implication matrix, there was a large

volume of data to process and subsequently present in an HVM. Researchers using this

HVM analysis argue it is the linkages between the attributes, consequences and values

that offer the most contribution (e.g. Deeter-Schmelz, Kennedy and Goebel, 2002).

Table 10

Summary Implication Matrix*

Comment categories	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Attributes	0.1	0.2	0.1	1.4	8.5		2.6	1.8	4.10	2.7	1.1	13.1	0.1	1.0	0.1	0.4	0.5	0.1	0.6	0.5	0.3	0.2	0.3	0.1
01 Career	3.4	0.2	0.1		0.2		0.1	3.8	0.4	2.2			0.1		8.4	0.4	0.2	1.1	0.1	0.3		0.2		0.3
02 Travel	0.3	2.1	0.1	0.3		2.2		4.4	0.2	1.2	1.0	0.1			3.4		0.2	0.1	0.1	0.2		0.2		
03 Military lifestyle		0.1		7.5	0.1		1.0	0.2	0.1			6.10					0.4		0.1					
04 Pay etc	3.2	0.1		1.0		5.3	0.1	1.2	0.4								0.2	0.1	0.1			0.2		
05 Sport & adventurous training	1.1	1.5		0.1			2.1	0.2			2.1		1.1	0.1		1.3	0.1	0.1			0.1		0.1	
06 Family and friends	1.2	1.2		0.1			4.8	1.0	1.0	0.2	2.3				0.1	2.0		0.2	0.2	0.1		0.1		
07 Military service		1.1					1.0	1.3	1.4	1.2	1.2	2.3	4.3	2.0	0.1	1.0	0.1	0.1	0.3	0.2	0.1	0.2	0.1	0.1
08 Job related	5.5	0.2		2.6	1.0	1.3	1.1	7.6	3.3	5.3	0.2	0.2	1.4	0.1	3.0	1.1	0.5	0.7	0.3	0.1	0.1	0.5	0.1	0.2
09 Experiences	1.0			2.2	0.2		2.2	0.2	4.10	2.0	2.3	1.2	0.2		0.1	2.5	0.2	0.6	0.3	0.1		0.1	0.1	
10 Personal development		2.1		2.0	1.2	1.1	1.0	2.3	2.3		1.1		2.2		1.0	1.3	1.2	2.1	2.3	1.0	0.1	3.3	0.1	0.2
Consequences	0.1			0.2			1.0	1.0		2.0					1.0		5.0		1.0	1.1	1.2	3.0		1.0
11 Meeting people							1.0					0.1			2.0					0.1				
12 Enjoyment	2.0	1.0			1.0		0.3	1.1	1.1		1.0	3.6				1.0	5.2	4	0.1			2.3	1.0	
13 Putting effort in		0.1		0.2			0.1	3.0	3.4	3.2	1.0					4.0	0.3		1.1	0.1	0.2	0.1		1.1
14 Financial security	1.1	1.0					1.1	2.2	1.1							2.5	0.1	0.2				0.1		
15 Progression and promotion	1.4	1.2		2.0			1.1	1.1		1.3	1.1				2.1	3.0	1.0	3.4	8.3			3.1	1.1	
16 Physical pursuits	0.1	0.2	0.1	1.4	8.5		2.6	1.8	4.10	2.7	1.1	13.1	0.1	1.0	0.1	0.4	0.5	0.1	0.6	0.5	0.3	0.2	0.3	0.1
17 Contribution to RAF	3.4	0.2	0.1		0.2		0.1	3.8	0.4	2.2			0.1		8.4	0.4	0.2	1.1	0.1	0.3		0.2		0.3

Table 10 (continued)

Implication Matrix*

Comment categories	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
18 Variety	0.1	1.2	1.0	1.2			3.1		5.3	2.1	1.0	2.2	2.0	1.0	2.3	1.0	1.1	1.3	2.7	5.5	0.1	1.2	4.0	3.1
19 Push self and reach potential	0.1	2.2	1.0	3.1	1.1		4.1	4.1		3.1		3.4	0.1		1.0	0.2	4.3	8.5	3.5	0.3	0.1	1.2	0.1	
20 Avoid boredom	1.0	1.3	1.0	0.2		0.1	1.0	6.5	3.3			1.0			1.1		2.5		2.1	3.3	1.1	1.1	1.3	0.1
21 RAF related		3.1		0.1			2	1.1	5.2			1.0		1.2			0.3	1.2	2.3			0.1	0.1	
22 Job security		2.3		3.1	2.2		1.4	3.3	2.1	2.2	1.0		1.0		1.1		1.7	1.0	1.0	2.3		0.3	0.5	0.2
23 Training and development		1.1						3.1	1.1	0.1		1.1			1.0		0.1	0.2	1.5	1.0		0.1		3.3
24 Flying		1.0									1.0	1.0						0.1		0.1				
25 Opportunities	4.3	1.0	0.1	2.0		2.1	1.0	5.4		2.0			1.0			0.1	1.0	1.2	0.2	1.3		3.4	0.1	0.4
26 Personal growth	1.1	2.1					1.0	2.1			1.0	1.0	0.1					1.4	2.3	0.1		3.2	0.1	
Values																								
27 Well-being																								
28 Achievement																								
29 Sense of purpose																								
30 Stimulation																								
31 Job satisfaction																								
32 Affiliation																								
33 Independence																								
34 Learning																								

* Note: This is a summary Implication Matrix as no relations exist between the attribute elements. The Implication Matrix displayed the number of incidences each comment category lead to another (Reynolds and Gutman, 1988). Titles for some codes are shorted for presentational reasons.

Figure 7 presents the HVM which depicts the major connections (determined through the construction of the Implication Matrix) between the ACV elements identified from the laddering interviews. The construction of the HVM is an intuitive activity with very few guidelines (Reynolds and Gutman, 1988), however, it is in essence a map constructed to represent key relationships between ACV elements. It is recognised that data reduction is often required to produce an HVM (i.e. not all ACV elements are represented) (Gengler and Reynolds, 1995). This is achieved by determining a 'cut off' point, that is, the lowest number of relations per element to include in the HVM to ensure that it includes all meaningful connections.. It is also recommended that the HVM presents at least 70% of the connections identified (Gengler and Reynolds, 1995). To achieve these conditions a cut off of seven was used which was an aggregate of DR and IR. This therefore included an acceptable 70% of the data and was comprised of seven attributes (70%), twelve consequences (75%) and five values (62.5%). To have included all ACV elements with their relationships between them would have made the HMV almost indecipherable.

The construction of the HVM was by trial and error. One guideline Reynolds and Gutman (1988) stipulate is that ideally no lines reflecting the relations between two elements should cross. This was not always possible in this instance; and indeed these difficulties reflect the complexity of the data and the inter-relations between elements. Due to the length of time it takes, and trial and error approach required to construct the HVM, full inter-rater reliability was not conducted. Instead a second rater checked the HVM for clarity and accuracy but did not attempt to construct their own map from the data. This is not unusual for research using the laddering technique (e.g. Gutman, 1987) because the HVM construction is so subjective and intuitive (Brunsø, Scholderer and Grunert, 2004). To try to mediate this reliability issue, the HVM was constructed based
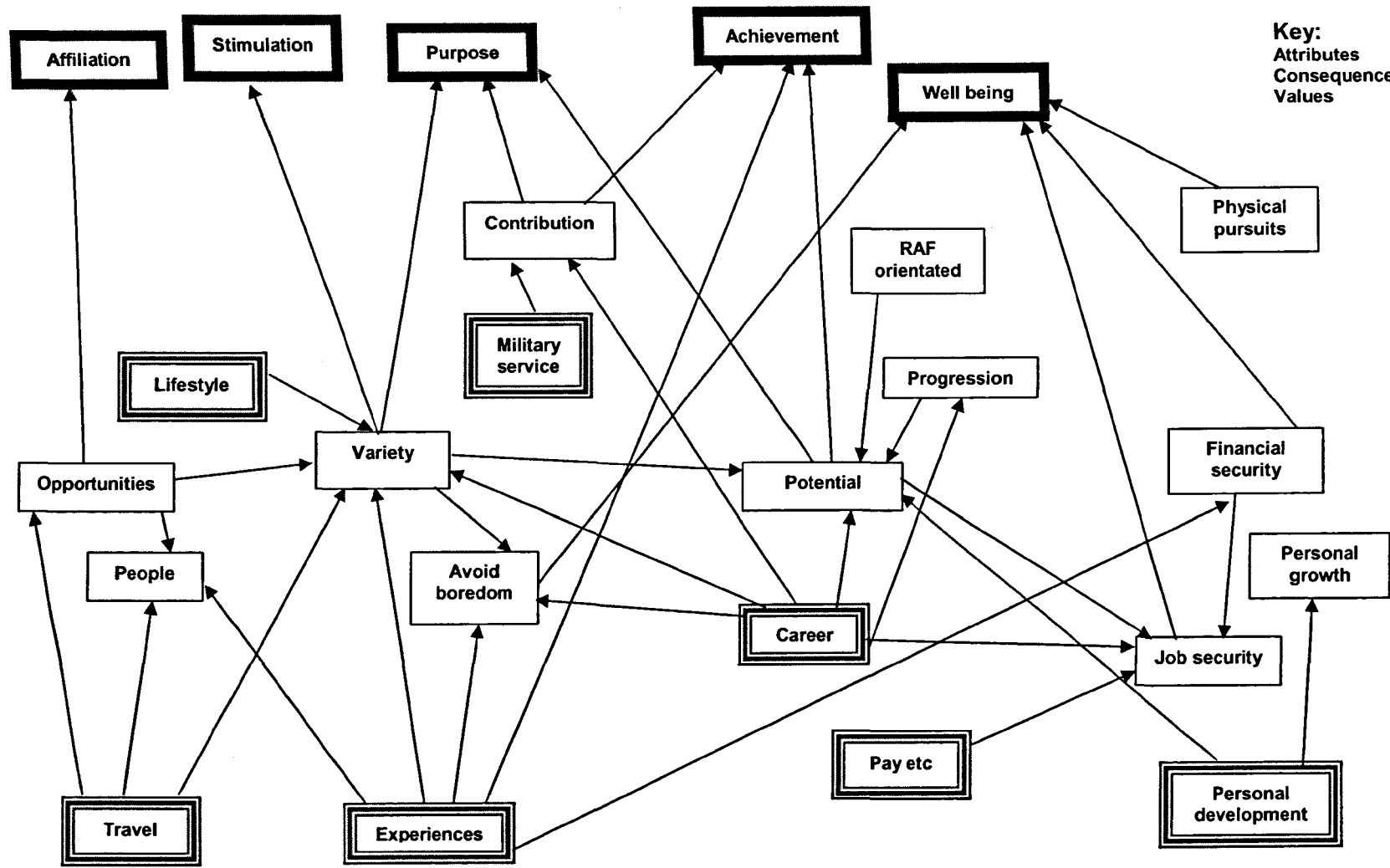
Figure 7: Hierarchical Value Map Depicting Applicants' Reasons to Apply to Join the RAF

on verified coding frames to counter the lower intersubjectivity (Grunert et al., 2001) and was subjected to intra-rater verification by constructing it separately on two occasions. There was 95% consistency but this was not surprising given that by this stage the data were heavily coded (Brunsø, et al., 2004).

Results

Main Reasons for Applying

The laddering built a picture of what job attributes the applicants were seeking, for instance, experiences, travel, sport and lifestyle; and what needs they were trying to address, for instance, career, personal development, pay, and job factors (Table 9). These attributes confirmed general expectations about why individuals might apply to join the RAF and indeed in many cases reflected recruitment information suggesting that the applicants' perceptions of the organisation were aligned and relevant. However, it was not clear from the initial attributes why these factors were important or what might underpin these attributes.

When probed the participants provided a range of reasons (consequences) related to wanting to have different experiences (enjoyment, avoiding boredom, flying, variety, RAF orientated); as well as having opportunities for growth and contribution (training and development, progression, putting effort in, personal growth, contribution); and being motivated by a sense of security (job and financial security). Finally, the values which underpinned these motivations were very clearly related to two clusters, happiness (affiliation, well-being, stimulation and job satisfaction) and accomplishment (achievement, independence, sense of purpose and learning). Ultimately, it is these factors that were driving applicants to apply.

HVM Linkages

As well as examining the comments derived from the laddering interviews, the

resultant coding and HVM provided a way of representing the linkages between key attributes, consequences and values in order to determine meaningful patterns; in this case with regard to motivations to join the RAF. Many of the factors in the implications matrix were related but five factors in particular generated the most linkages: the attributes of career and experiences, and the consequences of job security, variety and potential; indicating their significance. As can be seen from the HVM at Figure 6, several of the connections were intuitive, that is, one might expect to see them related; for instance, experiences related to avoiding boredom, or personal development related to personal growth. The HVM also helped to show the significance of these linkages. For instance, it was determined that the motivations related to variety, opportunities, and experiences lead to both value 'clusters' of happiness and accomplishment. On the other hand, security motivations (financial and job related) were related to happiness values only; and the potential and contributions motivations were related to the accomplishment values only.

Linking the Qualitative and Quantitative Research

The qualitative phase provided a list of reasons to apply to join the RAF which were generated by current or recent applicants, and this was important in ensuring face validity of the quantitative measure (Breaugh, 1992). This list was derived primarily from attributes (e.g. travel, sport) and some consequences (e.g. training, contribution), and was used as the basis for items related to organisational image and job characteristics.

The qualitative study demonstrated that whilst individuals could readily articulate why they had applied (i.e. provide attributes), deeper seated motivations (i.e. values) required probing to elicit and identify them. Whilst the underlying values elicited were very valuable in determining what motivated individuals, it was clear that

these values would not translate well into questionnaire items. By their very nature the values were not readily identifiable (i.e. they were not 'surface' factors which the participants immediately recalled) and hence it was necessary to use laddering interviews to elicit these values. In some cases the responses surprised the participants who provided them, which is not uncommon when using laddering (Reynolds and Gutman, 1988). To this end it was decided that it would be too challenging for applicants to recognise the significance of the items and that using values might cause validity issues. This premise was tested and confirmed by showing the list of values to applicants and subject matter experts. Whilst the subject matter experts understood the underlying values after explanation, neither groups readily identified with the values as reasons to join, as both were expecting attribute type items such as sport, travel, career and training.

Finally, the objective of the research was to investigate perceptions not underlying values, therefore the attributes identified in the qualitative phase were adequate for this purpose. It should be noted that the perceptions were related to more superficial issues and factors that attracted individuals to the organisation, whereas the values were related to long term needs such as career goals and well being; factors which although hugely significant for the long term management of individuals and fulfilment of their psychological contract, were beyond the scope of the current research.

Phase Two: Quantitative Component

The quantitative study set out to measure applicants' motivations to apply to join the RAF in terms of their job preferences and expectations; how the organisation is viewed by applicants in terms of their organisational image perceptions; what influences these perceptions; as well as assessing subsequent job-related decision making in terms

of job acceptance intentions. As aforementioned, given the numbers of RAF applicants, it was decided to capture their responses using a quantitative questionnaire. Crucially, this questionnaire sought to study actual applicants who were currently experiencing the application process to counter a criticism by Breaugh and Starke (2000) of the over-reliance of studies to use recruits not applicants as participants, which lead to issues of evidence quality. In addition, with regard to the specific environment of the military, in this case the RAF, Schreurs, Derous, De Witte, Proost, Andriessen and Glabeke (2005) stated that much military research with applicants has only been concerned with their demographic and background characteristics (e.g. Bachman, Segal, Freedman-Doan and O'Malley, 2000) and not with their perceptions and the origin or impact of these attitudes; and again this study sought to rectify that situation.

Propositions

The propositions for the current research study fall into four categories: recruitment source perceptions; familiarity and prior exposure; organisational image perceptions; and job characteristics. These four areas have been, to differing extents, associated with various recruitment outcomes including perceived attractiveness of an organisation and likely job offer acceptance. The current study proposed to explore these possible relationships within a new context (i.e. the RAF) and to understand whether any are significant predictors of positive recruitment outcomes.

Organisational attractiveness and job acceptance intentions. Two possible positive outcomes of recruitment are organisational attractiveness (Turban, et al., 1998) and job acceptance intentions (Macan, et al,. 1994). These outcomes were used as the dependent variables in this study. Collins and Han's (2004) research found that certain recruitment practices increased attraction to an organisation, and Turban found that initial impressions of the organisational image could lead to organisational

attractiveness. Job acceptance intentions are a vital recruitment outcome especially given the outlay expended on recruitment and selection. Job acceptance intentions have been linked with testing reactions (Macan, et al,. 1994), availability of alternatives (Rynes and Miller, 1983), and recruiters (Harris and Fink, 1987) but not necessarily recruitment sources or organisational image.

Recruitment source perceptions. Formal recruitment sources such as official recruitment literature, recruiters or road shows may be the first contact a job seeker has with an organisation and therefore it has been argued that this material is likely to influence applicant perceptions (Wanous, 1991). In particular, Barber and Roehling (1993) found applicants liked formal recruitment sources because they included complete information and tended to improve applicant perceptions of organisational attractiveness. Research has demonstrated a link between recruiters and job acceptance outcomes (e.g. Maurer et al., 1992) but the link to recruitment sources has not been well researched, as research in this area tends to focus on post-hire outcomes (e.g. Williams, Labig and Stone, 1993). Therefore:

- Hypothesis 1a: Usefulness of RAF recruitment sources will be positively associated with perceptions of the RAF as an attractive employer.

- Hypothesis 1b: Usefulness of RAF recruitment sources will be positively associated with an intention to accept a job offer with the RAF.

Familiarity and prior exposure. Familiarity has also been linked to increasing applicants' positive regard for an organisation (Gatewood et al., 1993), although the relationship between prior familiarity and a likely job acceptance intention has not been significantly established (e.g. Wanous, 1973). It is possible though that familiarity and prior exposure to an organisation like the RAF is an important influence and as such there is an association between familiarity and positive outcomes. Therefore:

- Hypothesis 2a: Perceived familiarity with the RAF will be positively

  associated with perceptions of the RAF as an attractive employer.

- Hypothesis 2b: Perceived familiarity with the RAF will be positively

  associated with an intention to accept a job offer with the RAF.

Organisational image perceptions. Positive organisational image has been

shown to be important in attracting applicants (Gatewood et al., 1993) and in resulting

in job acceptance (e.g. Powell, 1991). In particular, Lievens and Highhouse's (2003)

Instrumental-Symbolic model of organisational image theorised two different but

related types of organisational image perceptions which can affect how applicants

regard an organisation. Firstly, instrumental aspects, that is, job and organisational

factors such as pay and conditions, are regarded to be influential in forming a positive

organisational image important in attracting an individual to apply (Gatewood et al.,

1993). Subsequently, this initial attraction and decision to apply to an organisation is

associated with accepting a job offer (Powell, 1991). Therefore:

- Hypothesis 3a: Instrumental organisational image will be positively

  associated with perceptions of the RAF as an attractive employer.

- Hypothesis 3b: Instrumental organisational image will be positively

  associated with an intention to accept a job offer with the RAF.

Furthermore, Lievens and Highhouse (2003) proposed that symbolic aspects

such as assigning a personality like term to an organisation are also important in

attracting applicants. They further argue that symbolic aspects might help an individual

differentiate between organisations, especially important in making job acceptance

decisions. Therefore:

- Hypothesis 4a: Symbolic organisational image will be positively associated

  with perceptions of the RAF as an attractive employer.

- Hypothesis 4b: Symbolic organisational image will be positively associated with an intention to accept a job offer with the RAF.

Job characteristics perceptions. Job characteristics including job preferences and expectations such as pay and benefits, promotion prospects and organisational values have been shown to be positively related to organisational attractiveness (e.g. Rynes and Miller, 1983). In addition, these job characteristics help individuals to determine how well they would fit a given job and organisation. A good person-job fit has been found to predict job acceptance intentions (Judge and Cable, 1997). Therefore:

- Hypothesis 5a: Job characteristics will be positively associated with perceptions of the RAF as an attractive employer.

- Hypothesis 5b: Job characteristics will be positively associated with an intention to accept a job offer with the RAF.

Method

Participants

All participants for the quantitative phase were current applicants; and were drawn from two organisational entry level groups (officers and other ranks). Given the number of applicants to the RAF each year, a sample size of 2000 other ranks (the total number of applicants is approximately 13600, providing a confidence interval of 2) was calculated; and a sample size of 500 officers (the total number of applicants is approximately 5600, providing a confidence level of 4). A larger sample was possible for the other rank participants (and therefore a better confidence level) due the large number of other rank applicants and the opportunity to distribute the questionnaires across 40 locations, in comparison to the officer applicant participants who were all located at one location. The lower confidence interval for the officer sample was of less

concern as this cohort has a tendency to yield a higher response rate which would be expected to be in the region on 50%. The other ranks returns were expected to be lower than 30% and therefore a smaller confidence interval was required.

A total of 645 applicants returned a completed and useable questionnaire; yielding a response rate of 25.8%. This is a relatively low return rate but reflects the voluntary nature of the survey and the fact that the surveys were distributed towards the end of the recruiting year so it is more than possible that some AFCOs were unable to distribute all the surveys during the research timeframe. The response rate for officer applicants was 47.2% (n=236), compared with 20.4% (n=409) for other rank applicants. Other internal RAF studies have also found that other ranks tend to have lower responses rates in comparison to officers. The respondents ranged in age from 15 to 44, with a mean age of 21 years, although the mode was 18 years (n=101) and most applicants were between the ages of 16 to 23 years. Officer applicants were generally older than the other rank applicants, with the latter having only one respondent over the age of 31. The ratio of male applicants to female applicants was 3.9:1 (males, 79.6%, n=510; females, 20.4%, n=131). Females were slightly better represented for the officer applicants than for other ranks.

Procedure

A bespoke self-administered questionnaire was developed to address the sponsor's questions about applicants' perceptions of the RAF. A total of 2500 questionnaires were administered between Nov 07 and Jan 08 to RAF applicants across 41 locations where RAF applicants are screened, tested and selected. These locations represented 40 Armed Force Careers Offices (AFCOs) for other rank applicants and the Officer and Aircrew Selection Centre (OASC) for the officer applicants[11]. The same

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[11] The officer and other rank selection procedures differ.

questionnaire pack up was administered to all applicants[12] and consisted of a

questionnaire, covering letter (from the sponsor) and a return envelope. The

questionnaire included background information (Appendix I) and consent was obtained

by voluntary participation.

The pack ups were distributed by recruiting staff at the 41 locations to applicants

during their selection visit, which invariably includes periods of waiting. Recruiting

staff[13] invited applicants to complete a questionnaire and informed potential participants

that the questionnaire was voluntary, anonymous and participation had no bearing on

selection decisions. The questionnaires were sealed in envelopes and returned directly

to the researcher. The data were analysed using SPSS version 17.

Measures

Some items for the questionnaire were modified from previous research (e.g.

Powell, 1984); Harris and Fink, 1987; and Lievens and Highhouse, 2003); whilst other

items were constructed specifically for this study and reflected the particular

environment (i.e. the RAF). Appendix J presents the individual measures used in the

quantitative phase grouped as appropriate in relevant sub scales. Four different groups

of independent/predictor variables were measured: usefulness of recruitment sources;

familiarity and prior exposure; organisational image; job characteristics. Two groups of

dependent variables were measured: organisational attractiveness; job acceptance

intentions. Following workplace convention the Likert scales used in the questionnaire

were numbered counter-intuitively, for instance, 1=very attractive/5=not at all

attractive. These scales were reversed during analysis for the purpose of this study.

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[12] With the exception of an identifier in the top right hand corner - either an alphabetical code to identify

individual AFCOs or OASC - to determine whether questionnaire were returned from different locations.

[13] Recruiting staff were issued with distribution instructions.

Biographical information. In order to determine respondent characteristics, and ascertain any differences or similarities between respondents, a biographical information section was added and included questions on trade/branch[14] choice (i.e. the role/specialisation they were applying for); which entry level they were applying for; age; gender; and ethnic group. Due to the large proportions of male and white applicants, these were not used as test variables in this study. Similarly due to the large number of trades/branches available and subsequently wide dispersal of responses (in some cases only one applicant per trade), trade/branch was also not used as a test variable in this study. Entry level however was included in the study.

Usefulness of formal recruitment sources. The usefulness of seven different formal recruitment sources was determined using a 5 point Likert scale, for instance "How useful was the *recruitment source* in deciding to apply to the RAF" (1=very useful to 5=not at all useful). These recruitment sources were: TV/cinema advert, radio advert, recruitment brochure, RAF careers adviser, RAF careers fair, RAF poster/banner, RAF careers website. The list was identified by recruitment subject matter experts. These items were analysed individually as to differentiate the most useful.

Familiarity with and prior exposure to the RAF. Four individual items were developed with regard to familiarity with and prior exposure to the RAF. Achatz, Perry, Westat, and Lehnus (2000) found having a close relative in a military organisation to be an indicator of interest in military service; and in the qualitative phase interviews, participants mentioned that knowing someone in the RAF (sometimes family, sometimes friends) was important to their decision to apply. Similarly experience of the

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[14] Job roles/specialisms for other ranks are called trades; whereas officers' job roles/specialisations are called branches.

RAF, through study at school or visits, might well help to form pre-entry expectations (Scholarios, Lockyer, and Johnson, 2003). To this end three dichotomous (yes/no) items were asked with regard to prior experience: "Do you know anyone who works in the RAF?"; "Have you ever visited an RAF site?"; "Have you ever studied the RAF at school/college?". A fourth item related specifically to familiarity: "How familiar with the RAF were you before you applied?" was measured on a 5 point Likert scale (1= very familiar to 5= not at all familiar).

Instrumental and symbolic organisational image perceptions.
Organisational image was measured using twenty-one instrumental organisational image items and six symbolic organisational image items, derived from the qualitative phase and existing research such Lievens and Highhouse's (2003) job/organisational and symbolic characteristics. SMEs checked the items for appropriateness and the items were trialled with twenty-four applicants for comprehension and face validity. Due to access restrictions test re-test reliability could not be determined, although Rynes (1991) noted that applicants' perceptions are influenced throughout the recruitment process by various factors and so responses may change during the process thereby reducing the likely reliability coefficients.

Similar to Harris and Fink (1987), the item responses for the trial were factor analysed. A principal component analysis was used to determine the instrumental organisational image questionnaire scales from the twenty two trial items. The orthogonal rotation (Varimax Method) resulted in six factors with an eigenvalue greater than one and where loadings less than 0.50 were excluded (Appendix J presents the principal components analysis). These factors were labelled: travel, team, basic needs, development, organisational objectives, and financial aspects.

The psychometric properties were then determined by conducting a reliability

analysis. The instrumental organisational image sub scales were: travel (α = .96); team (α = .89); basic needs (α = .65); development (α = .73); organisational objectives (α = .85); and financial aspects (α = .79) (Appendix J presents the reliability analysis and individual items within each scale). Several items were retained within the sub scales despite lowering the Cronbach alpha of their respective sub scale. In the financial issues sub scale, the item "The RAF has a good death-in-service package" was retained at the sponsor's request. In the basic needs sub scale, the item "The RAF will offer me short term job security" was retained as although it was not a job expectation raised during the qualitative study, it was regarded as a comparator with the long term security item.

The symbolic organisational image sub scale was determined by asking participants to rate six matched pairs of 'personality traits' derived from SMEs. The pairs were caring/compassionate, prestigious/high status, challenging/demanding, competent/ proficient, sincere/honest, and exciting/stimulating. The item from each pair with the highest individual coefficient alpha was chosen. However the word pair competent/proficient was replaced with the term professional and so no Cronbach alpha could be reported. The final sub scale included the following items: "The RAF is .... caring, prestigious, challenging, sincere, professional and exciting (α = .78 for the 5 retained items from the original scale) (Appendix J presents the reliability analysis and individual items within each scale).

Job characteristics perceptions. The job characteristics sub scales were developed to determine the predictive value of job and organisational factors in choosing to apply to the RAF. The basis for the job attributes were similar to those used by Posner (1981), Powell (1984) and Harris and Fink (1987), and were supplemented with factors derived from the qualitative study which reflected the unique

employment circumstances of the RAF. Twenty-four items were trialled and twenty-three were retained for the final sub scales. A principal component analysis was used to determine the job characteristics questionnaire scales from the trial items. The orthogonal rotation (Varimax Method) resulted in four factors with an eigenvalue greater than one and where loadings less than 0.30 were excluded (Appendix J presents the principal components analysis). These factors were labelled: job benefits, values, job attributes and personal sacrifice.

The psychometric properties were then determined by conducting a reliability analysis. The sub scales were: job benefits ($\alpha = .57$); values ($\alpha = .79$); job attributes ($\alpha = .67$); and personal sacrifice ($\alpha = .72$) (Appendix G presents the reliability analysis and individual items within each scale). Several items were retained despite lowering the Cronbach alpha of their respective sub scale. In the values sub scale, the item "It is important that my individuality is respected" was retained at the sponsor's request because it reflects a core aspect of RAF ethos. In the career and job attributes sub scale, the item "I wanted a job related to aviation" was retained at the sponsor's request to determine how important aviation and flying are to applicants[15]. Finally, again at the sponsor's request, the item "I intend to change jobs a number of times in my career" was retained to determine if this was true for the applicant population, especially as this preference reflects the popular belief that young people wish to frequently change jobs (Worth, 2002).

Organisational attractiveness. Organisational attractiveness was measured in a similar manner to Turban et al.'s (1998) items on attraction to an organisation[16]. Two

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[15] Whilst the RAF is aviation focused and all roles are in support of aviation and maintaining Air Power, many are not day to day aviation related.

[16] "How attractive is this company as an employer, for you?". "How attractive is this job, for you?".

items were developed: "How attractive to you is the RAF as an employer?" and "How attractive to you is your first choice trade/branch as a job?" and measured using a 5 point Likert scale (1=very attractive to 5=not at all attractive). The psychometric properties were determined by conducting a reliability analysis (α = .68).

Job acceptance intentions. Job acceptance intentions were measured using several individual items. When applying to the RAF, applicants will select a given role (trade for other ranks; branch for officers) for example, pilot, nurse, weapons technician, air traffic controller, as first choice but will also select a second choice[17]. Accepting a job offer in their second choice role might indicate that the individual wants to join the RAF irrespective of the role they will occupy. Participants were asked: "If selected for the RAF, how likely is it you will join if you are successful in your first choice trade/branch?"; "If selected for the RAF, how likely is it you are successful in another choice trade/branch?". Each was measured using a 5 point Likert scale (1=very likely to 5=not at all likely). Initially, it was expected to use a job acceptance intentions scale using the two items mentioned above. However, the reliability analysis yielded a Cronbach alpha of 0.00, and on closer inspection of the items there was a greater spread of responses for the second item regarding an alternative job than the item regarding accepting a job in a first choice job. It appeared therefore that accepting a job was very much related to a specific role and it could not be assumed that a job offer for an alternative role would be as appealing to an applicant as their first role choice. As a result the two job acceptance intention items were treated separately for the analysis. Appendix K contains the final questionnaire version items.

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[17] An applicant may be chosen for a role other than their first choice because they failed to show adequate aptitude for that role, but also because there are no vacancies in that role.

Data Analysis

The hypotheses proposed for the quantitative study were relatively exploratory and were concerned with possible relationships and associations between different perceptions. For this reasons, regression analyses were used, where appropriate, to test whether these hypotheses could be supported or rejected. Furthermore, using regression analysis would facilitate the determination of which perceptions were more predictive than others of the recruitment outcomes. This analysis approach was not dissimilar to Turban (2001) regarding organisational attractiveness.

Results

Descriptive Statistics

Table 11 presents the means, standard deviations and intercorrelations for the study variables. Almost all the variables were significantly correlated with organisational attractiveness and job acceptance intentions. The notable exceptions were for familiarity with the RAF and organisational attractiveness, and also familiarity and accepting a job offer in their first choice role. In addition, there were far more significant relationships between the study variables and accepting a job offer in a second choice role than in a first choice role.

Group differences. Entry level, as an officer or other rank, was not proposed as an independent variable. However, given the differences in selection experiences of each group (as a result of different assessment requirements) and the different information presented to each group in some of the recruitment literature it was decided to conduct multiple regressions to determine if entry level was a predictor of the recruitment outcomes. There were no significant relationships between entry level and the dependent variables of organisational attractiveness ($\beta = -.04$, $p = .29$; $R = .04$, $R^2 = .00$; $F = 1.11$, $p = .29$) and job acceptance intentions (First choice role $\beta = -.06$, $p = .13$;

Table 11

Means, Standard Deviations and Intercorrelations of Study Variables

	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. Entry level[a]	645	0.63	0.48																							
Recruitment source[b]																										
2. TV/Cinema	620	3.45	1.05	.28**																						
3. Radio	574	2.75	1.00	.19**	.58**																					
4. Brochures	614	4.11	0.84	.42	.20**	.30**																				
5. Careers advisor	626	4.64	0.65	.17**	.16**	.18**	.39**																			
6. Careers fair	563	3.72	1.05	.13**	.38**	.39**	.28**	.32**																		
7. Poster/banner	588	3.15	0.99	.23**	.45**	.52**	.25**	.16**	.52**																	
8. Website	622	4.63	0.66	.09*	.10*	.09*	.34**	.39**	.22**	.16**																
Familiarity																										
9. How familiar[c]	644	3.44	1.08	-.07	-.03	-.05	-.01	-.01	.06	.06	-.08															
Know[d]	644	1.61	0.49																							
Visit[d]	644	1.56	0.50																							
Study[d]	644	1.15	0.35																							
Organisational image[e]																										
10. Financial aspects	635	4.21	0.53	.07	.24**	.19**	.22**	.18**	.24**	.21**	.19**	.09*	(.79)													
11. Basic needs	635	4.02	0.54	-.03	.12**	.09*	.14**	.13**	.13**	.16**	.17**	.14**	.49**	(.65)												
12. Travel	635	4.61	0.50	.12**	.08	.02	.17**	.18**	.09*	.09*	.20**	.10*	.43**	.41**	(.96)											
13. Development	634	4.54	0.46	.17**	.13**	.07	.19**	.28**	.14**	.15**	.23**	.06	.52**	.43**	.59**	(.83)										
14. Team	633	4.70	0.44	.00	.05	.00	.13**	.17**	.07	.06	.17**	.06	.40**	.38**	.55**	.68**	(.85)									
15. Org'al objectives	632	4.47	0.51	.00	.09*	.05	.15**	.18**	.05	.08*	.21**	.08	.44**	.40**	.43**	.67**	.60**	(.85)								
16. Symbolic attributes	632	4.49	0.45	-.01	.05	.11*	.18**	.21**	.13**	.12**	.19**	.08*	.43**	.37**	.44**	.55**	.49**	.56**	(.76)							

Table 11 (continued)

	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Job characteristics[e]																										
17. Job attributes	634	3.98	0.47	-.03	.10	.09*	.05	.08	.12**	.11**	.08	.11**	.34**	.27**	.25**	.33**	.30**	.38**	.37**	(.67)						
18. Job benefits	634	4.12	0.53	.02	.05	.06	.07	.02	.05	.07	.06	.07	.29**	.24**	.20**	.27**	.25**	.33**	.28**	.63**	(.57)					
19. Values	634	4.54	0.39	.07	.09*	.08	.16**	.18**	.08	.09*	.16**	.08	.39**	.29**	.42**	.44**	.45**	.49**	.47**	.49**	.48**	(.79)				
20. Personal sacrifice	634	4.26	0.51	.08*	.04	.03	.12**	.15**	.09*	.10*	.14**	.07	.36**	.27**	.35**	.41**	.36**	.45**	.42**	.44**	.41**	.56**	(.72)			
21. Attractiveness[f]	605	4.69	0.47	-.04	.14**	.07	.17**	.18**	.10*	.05	.17**	.07	.29**	.28**	.28**	.36**	.33**	.34**	.37**	.16**	.19**	.32**	.27**	(.69)		
Job Acceptance Intentions[g]																										
22. First choice	639	4.90	0.36	-.06	-.05	-.06	-.01	.05	-.06	-.06	.04	.02	.02	.05	.09*	.10*	.12**	.13**	.12**	-.02	.03	.10*	.09*	.20**		
23. Another role	628	3.95	1.07	.07	.09*	.05	.09*	.11**	.11**	.06	.12*	.14**	.11**	.12**	.13**	.20**	.13**	.15**	.21**	.02	-.03	.10*	.17**	.09*	.18**	

Note: * p < 0.05   ** p < 0.01. Numbers in parentheses are coefficient alphas for the sub scales eg career development or travel. [a] Dichotomous scale (0 = officer/1=other rank). [b] 5 point Likert scale (5=very useful – 1=not at all useful). [c] 5 point Likert scale (5=very familiar – 1=not at all familiar). [d] Dichotomous scale (2=yes/1=no). [e] 5 point Likert scale (5=strongly agree – 1=strongly disagree). [f] 5 point Likert scale (5=very attractive – 1=not at all attractive). [g] 5 point Likert scale (5=very likely – 1=not at all likely).

$R = .06$, $R^2 = .00$; $F = 2.31$, $p = .19$; Another role $\beta = .07$, $p = .06$; $R = .07$, $R^2 = .01$; $F = 3.43$, $p = .06$). However, independent samples t-tests (and for categorical items a chi-square test) were conducted and a number of significant relationships with regard to entry level where derived which are presented in Table 12. Furthermore, the multiple regressions conducted for the hypotheses testing included separate analyses for officers and other rank applicants as well as the total sample.

Table 12

Significant Group Differences between Entry Level and Study Variables

Variable	*t* or χ value	P value	Higher score (O or OR) [a]
Recruitment source usefulness			
TV/Cinema	-7.22	.000	OR
Radio	-4.65	.000	OR
Careers advisors	-3.95	.000	OR
Careers fair	-2.89	.004	OR
Poster/banner	-5.74	.000	OR
Website	-2.18	.030	OR
Familiarity & prior exposure to RAF			
Knowing someone in RAF	45.65	.000	O
Visited RAF bases	120.61	.000	O
Organisational image			
Travel	-2.86	.004	OR
Development	-4.12	.000	OR
Job characteristics			
Personal sacrifice	-2.12	.035	OR

Note: [a] 'O' refers to officer applicants and 'OR' refers to other rank applicants.

Test of Hypotheses

Organisational attractiveness. The multiple regression analyses for the dependent variable of organisational attractiveness (perceptions of the RAF as an attractive employer) are shown in Tables 13 to 17. In support of Hypothesis 1a, the recruitment sources of TV/Cinema, brochures and the website were significant predictors of organisational attractiveness ratings; explaining 8% of the variance in attractiveness scores (Table 13).

Table 13

Regression Analyses Predicting Organisational Attractiveness with Recruitment

Sources

Predictor	Total β	Officer β	Other rank β
Recruitment source usefulness			
TV/Cinema	.13*	.15	.16*
Radio	-.02	-.18	.04
Brochure	.14**	.20	.11
Careers advisors	.06	.03	.10
Careers fair	.03	.00	.04
Poster/banner	-.08	.09	-.09
Website	.11*	.06	.14*
R	.27	.30	.31
R²	.08	.09	.10
F	5.55***	2.30*	4.64***

Note: * p < 0.05   ** p < 0.01   *** p< 0.001. β is the standardised coefficient

TV/Cinema and the website were more predictive for other rank applicants'

organisational attractiveness perceptions than officer applicants. However, there were

no significant relationships between familiarity with and prior exposure to the RAF and

so Hypothesis 2a was not supported; the null hypothesis could not be rejected (Tables

14 and 15).

Table 14

Regression Analyses Predicting Organisational Attractiveness with Familiarity

Predictor	Total β	Officer β	Other rank β
Familiarity with RAF	.07	.04	.08
R	.07	.04	.08
R²	.01	.00	.01
F	2.75	.32	2.51

Note: * p < 0.05   ** p < 0.01   *** p< 0.001. β is the standardised coefficient

Table 15

T-Test Analyses for Organisational Attractiveness and Prior Exposure to RAF

Variable	Total *t* value	Officer *t* value	Other rank *t* value
Prior exposure to RAF			
Knowing someone in RAF	.23	.94	.13
Visited RAF bases	-.88	.60	-.82
Studied RAF at school/college	-.66	-1.25	-.09

Note: * p < 0.05   ** p < 0.01   *** p< 0.001.

Hypothesis 3a was not supported for the total sample as no instrumental organisational image variables predicted organisational attractiveness ratings. However, for the officer applicants development aspects of organisational image were positive predictors of organisational attractiveness (Table 16). In support of Hypothesis 4a, symbolic organisational image aspects were predictive of organisational attractiveness, and in the case of the total sample accounted for 19% of the variance (Table 16).

Table 16

Regression Analyses Predicting Organisational Attractiveness with Organisational Image

Predictor	Total β	Officer β	Other rank β
Organisational image			
Financial aspects	.05	.06	.05
Basic needs	.08	.01	.11
Travel	.03	.12	-.01
Development	.09	.28**	.02
Team	.08	.03	.09
Org'al objectives	.06	-.03	.10
Symbolic	.18***	.19**	.17*
R	.44	.54	.40
R^2	.19	.29	.16
F	20.34***	12.94***	10.16***

Note: * p < 0.05   ** p < 0.01   *** p< 0.001. β is the standardised coefficient

Finally, in support of Hypothesis 5a, the job characteristics of values and personal sacrifice were positively related to organisational attractiveness and were predictive of 12% of the variance for the total sample (Table 17). There were additional significant relationships for the other rank applicants with regard to job attributes and

job benefits, although the former was in the negative direction.

Table 17

Regression Analyses Predicting Organisational Attractiveness with Job Characteristics

Predictor	Total β	Officer β	Other rank β
Job characteristics			
Job attributes	-.04	.13	-.16*
Job benefits	.04	-.11	.15*
Values	.24***	.30***	.21**
Personal sacrifice	.14**	.18*	.14*
R	.34	.45	.33
R^2	.12	.20	.11
F	20.09***	14.07***	11.01***

Note: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$. β is the standardised coefficient

Job acceptance intentions. The multiple regression analyses for the dependent variables of job acceptance intentions (first choice role and another role) are shown in Tables 18 to 22. There far fewer significant relationships between the study variables and job acceptance intentions, and where there were association these were often for accepting another role other than the first choice job. Hypothesis 1b regarding recruitment sources was not supported for either the first choice or another role (Table 18). Similarly, Hypothesis 2b was not supported for with the first choice or another role with regard to both familiarity with and prior exposure to the RAF (Tables 19 and 20).

There was very limited support for instrumental organisational image perceptions (Hypothesis 3b), and this was only in relation to development aspects positively predicting acceptance of another role (Table 21). In addition symbolic organisation image perceptions were only predictive of accepting another role (Hypothesis 4b) (Table 21).

Finally, there was mixed support for Hypothesis 5b. The job characteristics of values were positively associated with and predictive of job acceptance intentions for a first choice role, although job attributes were negatively associated with accepting first

job choice. The job characteristics of personal sacrifice were positively associated with

accepting another role, however job benefits were negatively associated with accepting

another job role. Job characteristics were more predictive of job acceptance intentions

for other rank applicants than officers (Table 22).

Table 18

Regression Analyses Predicting Job Acceptance Intentions with Recruitment Sources

Predictor	Total β		Officer β		Other rank β	
	1ˢᵗ choice	*Another role*	*1ˢᵗ choice*	*Another role*	*1ˢᵗ choice*	*Another role*
Recruitment source usefulness						
TV/Cinema	-.02	.05	.18	.02	-.10	.04
Radio	-.02	.01	-.10	.05	.02	-.02
Brochure	-.04	.01	.06	.10	-.08	-.01
Careers advisors	-.02	.02	-.02	-.01	-.03	-.02
Careers fair	-.04	.09	-.13	.14	.00	.08
Poster/banner	-.02	-.05	-.04	-.22*	-.03	.02
Website	.06	.09	.08	.12	.03	.07
R	.10	.16	.18	.24	.14	.13
R²	.01	.03	.03	.06	.02	.02
F	.75	2.00	.81	1.51	.98	.75

Note: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$. β is the standardised coefficient

Table 19

Regression Analyses Predicting Job Acceptance Intentions with Familiarity

Predictor	Total β		Officer β		Other rank β	
	1ˢᵗ choice	*Another role*	*1ˢᵗ choice*	*Another role*	*1ˢᵗ choice*	*Another role*
Familiarity with RAF	-.02	.01	-.09	.02	.01	.12
R	.12	.01	.09	.02	.01	.02
R²	.00	.00	.01	.00	.00	.00
F	.20	.12	1.74	.10	.04	.13

Note: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$. β is the standardised coefficient

Table 20

T-Test Analyses for Job Acceptance Intentions and Prior Exposure to RAF

Variable	Total t value		Officer t value		Other rank t value	
	1st choice	Another role	1st choice	Another role	1st choice	Another role
Prior exposure to RAF						
Knowing someone in RAF	-.49	-.30	.73	-.14	-.44	-1.02
Visited RAF bases	-.90	1.15	.86	1.10	-.65	-.31
Studied RAF at school/college	.58	.33	1.53	-.22	-.85	.80

Note: * p < 0.05   ** p < 0.01   *** p< 0.001.

Table 21

Regression Analyses Predicting Job Acceptance Intentions with Organisational Image

Predictor	Total β		Officer β		Other rank β	
	1st choice	Another role	1st choice	Another role	1st choice	Another role
Organisational image						
Financial aspects	-.08	- .03	.03	-.03	-.12	-.03
Basic needs	-.01	.03	-.02	.11	-.03	-.03
Travel	.03	.00	-.04	-.03	.08	.02
Development	-.01	.15*	.15	.15	-.07	.10
Team	.05	-.03	-.12	-.11	.12	.05
Org'al objectives	.08	-.02	.11	.00	.08	-.01
Symbolic	.08	.15*	.06	.15	.08	.17*
R	.16	.23	.20	.23	.20	.26
R²	.03	.05	.04	.06	.04	.07
F	2.36*	4.95***	1.34	1.82	2.27*	3.77**

Note: * p < 0.05   ** p < 0.01   *** p< 0.001. β is the standardised coefficient

Table 22

Regression Analyses Predicting Job Acceptance Intentions with Job Characteristics

Predictor	Total β		Officer β		Other rank β	
	1st choice	Another role	1st choice	Another role	1st choice	Another role
Job characteristics						
Job attributes	-.12*	-.01	-.14	-.06	-.13	.05
Job benefits	.02	-.14*	-.03	-.09	.06	-.19**
Values	.11*	.06	.14	.02	.10	.09
Personal sacrifice	.07	.19*	.10	.20*	.07	.18**
R	.14	.21	.19	.18	.14	.23
R²	.02	.04	.04	.03	.02	.06
F	3.14*	6.75***	2.10	1.91	2.00	5.53***

Note: * p < 0.05   ** p < 0.01   *** p< 0.001. β is the standardised coefficient

Summary. In summary, Hypotheses 1a, 4a, 5a, 3b, 4b, and 5b were supported and related to both organisational attractiveness and job acceptance intentions, and the predictor variables of recruitment sources, organisational image and job characteristics. The Hypotheses 2a, 3a, 1b, and 2b were not supported and related to both organisational attractiveness and job acceptance intentions, and the predictor variables of recruitment sources familiarity with and prior exposure to the RAF, and instrumental organisational image.

Discussion

In this study I aimed to inform RAF recruitment policy and delivery by providing practical recommendations based on an investigation of individuals' reasons to apply to join the RAF; and their perceptions of the organisation including recruitment sources, familiarity, organisational image, job characteristics, organisational attractiveness and likely job acceptance intentions. In order to achieve this aim, two separate phases were conducted. Firstly, a qualitative interview phase was conducted to determine reasons to join the RAF; and these interviews helped to generate an applicant derived set of job preferences and expectations (Breaugh, 1992). The second quantitative phase used a bespoke questionnaire to determine which applicant perceptions might by associated with the outcomes of organisational attractiveness and job acceptance intentions.

In terms of my work practice, this study was also an opportunity to enhance my research output by applying a new theoretical framework to help investigate and explain applicant perceptions; and utilise a new methodology, namely the MEC laddering technique. Furthermore, by grounding the research in a theoretical framework I hoped to bring rigour to a real-world organisational issue of informing recruitment policy and delivery; and also demonstrate that pragmatic science can be achieved by combining

theory and research to deliver an output which has both practical and generalisable

implications (Anderson et al., 2001).

Interpretation of Results

Reasons to Join. In order to determine applicants' reasons to join, the

qualitative phase utilised a laddering technique based on MEC theory to investigate the

characteristics and underlying values. The interviews provided a wealth of information

worthy of a discourse analysis study in their own right but using MEC theory the

responses were reduced to a manageable set of comment categories and these were used

to inform the questionnaire design. The comment categories were also used to construct

an HVM to present the significant relationships between these responses. Examining

these factors and their connections indicated the values that underpinned superficial

reasons to join and how these applicant motivations are formed. Crucially, these

findings show that whilst applicants cited a wide range of reasons to apply, such as

travel, career, lifestyle and sport, there were a smaller number of values which

underpinned these attributes and which actually drive behaviour and decision making

(Gutman, 1997). The emergent values were very clearly related to two clusters:

happiness (affiliation, wellbeing, stimulation and job satisfaction) and *accomplishment*

(achievement, independence, sense of purpose and learning).

The qualitative research also demonstrated that these reasons to apply (and their

underlying values) were interrelated. Some of these links were intuitive. However, an

interesting set of connections was revealed in that some reasons to apply (variety,

opportunities, and experiences) related to both the value clusters of *happiness* and

accomplishment; whereas security reasons (e.g. financial and job related) were related

to the *happiness* value only. In addition reaching one's potential and making a

contribution were related to the *accomplishment* value only. This suggests that

happiness drives security needs but not achieving one's potential or actively contributing to the RAF, as these were only related to accomplishment. Significantly, the applicants may be unaware of these underlying motivations, and indeed the reason for using laddering is because these values are difficult to articulate (Reynolds and Gutman, 1988). The qualitative findings demonstrated that the motives and reasoning underneath various attributes should not be assumed nor should the relationships. Whilst the qualitative phase was planned to support the quantitative phase design, the additional information derived from the laddering provides important insight and opportunities for future work.

Organisational attractiveness. One of two study dependent variables was organisational attractiveness. Organisational attractiveness is a desired outcome of recruitment efforts (Turban et al., 1998) and has been linked with organisational image (Gatewood et al., 1983), as well as job and organizational attributes (Rynes, 1991). A two-item scale was used and overall the RAF was rated to be an attractive employer. This is perhaps unsurprising as the respondents were active applicants, not just speculative job enquirers/seekers; nevertheless the research confirmed this assumption. Five hypotheses were proposed to test whether this organisational attractiveness (perceptions of the RAF as an attractive employer) was positively related to the study variables of usefulness of recruitment sources, familiarity with and prior exposure to the RAF, instrumental and symbolic organisational image, and job characteristics. Organisational attractiveness was also positively correlated with the other dependent variable of job acceptance intentions.

Usefulness of recruitment sources. All recruitment sources were rated as useful to some extent; although brochures, RAF careers advisors and the RAF careers website stood out as the most usefulness. Interestingly, though it was the recruitment sources of

TV/Cinema, brochures and the RAF careers website which were significant predictors of organisational attractiveness. Two of these sources, that is, the RAF careers website and brochures, contain a wealth of detailed information and therefore it is likely that they might be associated with perceptions of the RAF as an attractive employer. Previous research has shown that text based recruitment sources may be regarded as unambiguous and thus preferred by applicants (Barber and Roehling, 1993). Although, like the RAF careers website and brochures, RAF careers advisors were rated by applicants as useful as a recruitment source they were not predictive of organisational attractiveness; even though there was a significant positive correlation between advisors and organisational attractiveness. This contradicts earlier research by Schreurs et al. (2005) who found that careers counsellors had a positive impact on how attractive applicants viewed the organisation (also a military organisation in their study). Indeed careers advisors are more likely to be positively rated if they are regarded as competent (Rynes and Miller, 1983), and credible and approachable (Rynes and Boudreau, 1986). The results suggest that whilst RAF careers advisors are a valuable recruitment source, this is likely to be related to the provision of information but not organisational attractiveness.

Interestingly, whilst TV/Cinema was not rated as useful as the RAF careers website, brochures or RAF careers advisors, it was still a predictor variable for organisational attractiveness. It is possible that the TV/Cinema adverts, whilst containing limited information, are still powerful in creating a positive impression and leaving the applicant with increased organisational attractiveness; although this study did not determine a causal link.

Group differences were conducted for the entry level; as either an officer or other rank. The recruitment sources were more predictive of other rank applicants'

organisational attractiveness perceptions than officer applicants. The cause of this

difference can only be surmised, although results showed that other rank applicants

were less likely to know someone in the RAF or to have visited an RAF base, and so it

is possible that they would be more likely to derive their organisational attractiveness

perceptions from recruitment sources. In summary, particular recruitment sources were

more predictive of organisational attractiveness than others, but not always because of

the level of information or detail they provided. Furthermore, what predicted

organisational attractiveness varied according to the entry level of the applicants.

Familiarity with and prior exposure to the RAF. Whilst recruitment sources

were positively related to organisational attractiveness, there were no significant

relationships with familiarity or prior exposure. This is not actually that surprising

given that the dependent variable was organisational attractiveness, that is, aspects

which might lead to or enhance the attractiveness of an organisation. this is because

familiarity is perhaps more likely to be related to realism than attractiveness (Breaugh

and Starke, 2000). Some researchers have argued knowing someone in the organisation

should provide a positive impression of the organisation (e.g. Turban, 2001); whilst

others have argued that the information is not necessarily more positive but more

realistic (Phillips, 1998) where employees highlight both good and bad aspects.

Familiarity and prior exposure could be related to RJPs, and certainly more than to

recruitment sources (Williams et al., 1993); but RJPs do not necessarily improve an

applicant's attraction to an organisation (e.g. Wanous, 1991) but instead given them a

more realistic impression, and as such lowering expectations.

As aforementioned, significantly more officer level applicants were likely to

know someone in the RAF, or have visited an RAF base and therefore have more prior

exposure to the organisation. It is unlikely that these applicants did not derive some

benefit from this exposure, and it appears not to have diminished their motivation to

apply. Indeed, whilst an under-researched recruitment topic (Breaugh, 2008), site visits

have been regarded as valuable (Boswell, et al., 1993). In summary, it appears that

familiarity, whilst not predicitive of organisational attractiveness remains an important

variable, and one which is more likely to be related to organisational realism than

organisational attractiveness.

Organisational image. Analyses were conducted to determine associations

between instrumental and symbolic organisational image and organisational

attractiveness. With regard to the total sample, there were no instrumental (tangible job

and organisation aspects) organisational image variables which predicted organisational

attractiveness ratings. This contradicts earlier research regarding significant

relationships between instrumental organisational image dimensions and Armed Forces'

attractiveness (Lievens et al., 2005). However, in their research only two out of nine

instrumental image aspects were actually predictive, and in Lievens and Highhouse's

(2003) study not all instrumental image factors were predictive. However, in the

present study there were group differences; and for the officer applicants development

aspects of organisational image were positive predictors. These aspects included items

on career prospects, promotion prospects, education and training opportunities, and as

such potentially made the RAF appear attractive as an employer (and more so than for

the other rank applicants). It is not possible to be certain if this was the case, although

many officer applicants are graduates and research has shown that career and training

are important draws to an organisation for graduates (Garavan and Morley, 1997).

Symbolic (trait like inferences) aspects of organisational image on the other

hand were far more predictive of organisational attractiveness. This finding supports

both previous research regarding the predictive nature of symbolic organisational image

(e.g. Slaughter et al., 2004), and also that applicants were able to perceive the RAF in 'personality' or attribute terms (Lievens and Highhouse, 2003; Lievens et al., 2005). Research by Slaughter et al. (2004) also found, in a similar vein to Leary et al. (1986), applicants perceived organisations to be more attractive if they regarded these organisations to reflect their own personality traits. This would suggest that RAF applicants might well regard themselves to share the characteristics/attributes of the organisation such as 'exciting', 'caring', 'professional' and 'sincere'. Recent research by Schreurs, Druart, Proost and De Witte (2009) investigated if applicants' personalities moderated the relationship between symbolic factors and organisational attractiveness. They found that the importance of symbolic aspects of organisational image depended on the personality characteristics of the applicants themselves; therefore those that valued 'sincerity' rated high on 'conscientiousness'; whilst 'excitement' was related to individuals high on 'openness to experience'. To sum up, symbolic organisational image aspects were more predictive than instrumental aspects of organisational attractiveness; perhaps reflecting the appeal not of tangible job related features but of trait like inferences about the personality of the RAF.

Job characteristics. Finally, with regard to organisational attractiveness, analyses were conducted to determine any relationships between job characteristics and organisational attractiveness. The job characteristic sub scales of values (including items on respecting individuality, chain of command, colleagues; loyalty; serving the country) and personal sacrifice (including items on doing things rather not do; being apart from family and friends; volunteering for additional duties; putting self at personal risk; working at location prefer not to) were positively related to organisational attractiveness. Both these sub scales include items related to specific military requirements (albeit the wording was generic) which might be regarded as negative

aspects of the job (Schreurs and Lescreve, 2001). It could be inferred that the applicants

had a realistic expectation of the values they are expected to espouse and the kinds of

sacrifice, and in some cases risk, they may face. However, it cannot be ascertained

from the data that values and personal sacrifice were themselves an appealing draw,

however they remain predictive of organisational attractiveness scores.

There were additional significant relationships for the other rank applicants with

regard to job attributes (including clearly defined job path, good sporting and fitness

opportunities) and job benefits (including health and dental benefits, good pension plan,

looking after families), although the former was in the negative direction. This result is

surprising given previous research that supports the importance of job attributes (e.g.

Turban et al., 1993) on organisational attractiveness. It is possible that there are

moderating variables influencing this relationship such as RJPs (Wanous, 1991) or that

these benefits are not actually regarded positively. In summary, some job

characteristics were predictive of organisational attractiveness but this was a rather

mixed and unclear set of results.

Job acceptance intentions. The study's second dependent variable was job

acceptance intentions. Job acceptance is a goal of recruiters once they have offered a

job to a successful candidate (Turban et al., 1998). For the current study, applicants

were asked two separate items to determine job acceptance intentions – accepting a job

in their first choice role, or in another role. The scores for a first choice role were very

high (i.e. indicating a high likelihood that they would accept a job offer in that role), but

declined with regard to accepting an alternative role. A number of hypotheses were

proposed to test whether job acceptance intentions were positively related to the study

variables of usefulness of recruitment sources, familiarity with and prior exposure to the

RAF, instrumental and symbolic organisational image, and job characteristics. In

general the study variables were less predictive of job acceptance perceptions than for

organisational attractiveness. Interestingly where there were significant associations

these were often for accepting another role other than the first choice job, despite

overall fewer applicants being willing to do so. Indeed, there were many more positive

correlations between the study variables and job acceptance of another role, than for

accepting a first choice.

It is possible that an actual trade/branch is very important in accepting a job

offer in an individual's first choice role; whereas if an alternative role has to be accepted

(in order to join the RAF) then other organisational factors become more prominent

(Osborn, 1990). Therefore individuals may well decide to weigh up and compare other

organisational image and job characteristics far more carefully if they are offered a

different role; perhaps something they did not actively conduct with regard to their first

choice (for which the job aspects are the initial draw e.g. flying). This does suggest that

individuals are still willing to join the RAF, irrespective of role, but this is not the case

across the whole sample. One theoretical explanation for this might be that individuals

can still achieve 'person-situation congruence' (Holland, 1966) in a second role. Liden

and Parsons (1986) suggested that some individuals may not have many job alternatives

and so would take up a job offer, even if it is not their first choice (Bretz et al., 1989),

and indeed could be the case in a recession for instance. However, this would not be an

adequate explanation for the increase in positive correlations for an offer in another role

in this case as the financial crisis has not yet occurred.

Usefulness of recruitment sources. Although there were some positive

associations between recruitment sources and job acceptance intentions, these were not

predictive. There has been research to link job acceptance intentions with recruitment

information (Maurer et al., 1992) in that limited information can reduce job acceptance

intentions, but it is not possible to determine from this current data if recruitment

sources assisted in job acceptance intentions decisions. It is possible that recruitment

sources assist an individual to apply to an organisation (Herriot and Rothwell, 1981)

rather than to accept a job offer. Consequently, other factors are more predictive, or

having a moderating relationship as indeed much happens within a recruiting process

between exposure to recruitment information and job acceptance. In sum, the

recruitment sources utilised by the applicants did not predict their job acceptance

intentions for either their first or second choice roles.

Familiarity with and prior exposure to the RAF. Furthermore, familiarity with

and prior exposure to the RAF were not predictive; although familiarity was positively

correlated with accepting an alternative role. Familiarity and prior exposure could be

associated with RJPs, and whilst these do not necessarily predict the likelihood of job

acceptance (Wanous, 1973) they do lower expectations important for reducing early

attrition from an unfulfilled psychological contract (Rousseau, 1990). Much of the

research on job acceptance intentions, has been related to experiences during the

selection process such as testing (e.g. Macan et al., 1994) recruiter characteristics (e.g.

Harris and Fink, 1987) and job attributes (e.g. Turban et al., 1993) rather than RJPs.

Chapman et al. (2005), amongst their results regarding what predicted various recruiting

outcomes, found that 'perceived work environment' and 'type of work' were predictors

for job acceptance intentions leading them to conclude that "applicants place a lot of

weight on what they imagine their future job environment will be like when forming

their acceptance intentions" (p. 935). Such information could well be gleaned from

knowing someone in the organisation and suggests that familiarity could have some

benefit. In summary, familiarity and prior exposure were not predictive of job

acceptance intentions in this study, but it is possible that this information might still

inform these decisions at some level even if not consciously.

Organisational image. There was very limited support for instrumental

organisational image perceptions predicting job acceptance intentions. Where there was

was a significant relationship this was in relation to development aspects and accepting

another role. In addition, symbolic organisation image perceptions were only predictive

of job acceptance intentions with respect to accepting another role. It is possible that,

like recruitment sources, organisational image is more influential (or at least more

predictive) during the early stages of recruitment, during attraction, enquiry and

application, but not during selection and job acceptance decision making.

Organisational image research generally finds a stronger association between

organisational image dimensions and attraction or positive regard for an organisation,

but not for job acceptance intentions (e.g. Turban, 2001; Gatewood et al., 1993); where

there have been links to job acceptance intentions this has been indirectly through

applicant attraction (Powell, 1991). In summary, instrumental organisational image was

not predictive of job acceptance intentions and symbolic aspects were only predictive of

a second choice role. This supports previous research and gives weight to the argument

that organisational image is important for organisational attraction but other factors are

more important with regard to job acceptance intentions.

Job characteristics. Finally, some job characteristics were predictive of job

acceptance intentions. With regard to accepting an applicant's first choice role, values

(such as respecting individuality, chain of command, loyalty) were positively associated

with and predictive of job acceptance intentions. However, job attributes (such as

having a defined career path, using qualifications, sporting opportunities) were

negatively associated with accepting first job choice. Again job attributes were

negatively associated with the dependent variable in the same way as organisational

attractiveness. The reasons for this would require further exploration including the

appropriateness of the sub scale.

With regard to accepting an alternative role, the personal sacrifice sub scale (e.g.

doing things rather not do, being apart from family and friends, volunteering for

additional duties), was positively associated with job acceptance intentions; although

job benefits (e.g. health and dental benefits, long term job security, look after family)

were negatively associated with accepting another job role. There were some group

differences; job characteristics were more predictive of job acceptance intentions for

other rank applicants than officers.

These results are somewhat mixed and it could be argued do not necessarily

reflect previous research where job attributes and the nature of work have been

associated with job acceptance (Turban et al., 1993); as has a perceived person-job fit

(Judge and Cable, 1997). Interestingly though, Ryan, Sacco, McFarland and Kriska

(2000) found that job attribute perceptions were not predictive of recruitment

withdrawal suggesting that their influence has been over-played (Schreurs, 2003). More

recently, research has been more positive, for instance, Chapman et al. (2005) found job

characteristics especially those related to person-job fit to be strong predictors of job

acceptance intentions. To sum up, some job characteristics were predictive of job

acceptance intentions for a first choice and an alternative role; although the

inconsistency of results would require further investigation.

Significant relationships. This research determined a number of key

relationships between the study variables and the dependent variables of organisational

attractiveness and job acceptance intentions. Of note were the predictive ability of the

TV/Cinema, brochures and the RAF careers website; symbolic organisational image

aspects; values and personal sacrifice job characteristics of the dependent variable organisational attractiveness. With regard to job acceptance intentions there was fewer relationships but those of note were the job characteristics sub scales of values which was predictive of accepting first choice role. With regard to accepting another role, development aspects of instrumental organisational image, symbolic organisation image, and the job characteristics sub scales of personal sacrifice were predictive of job acceptance intentions. These relationships show a significant association but causation, influence or impact cannot be inferred from this data. In addition, there were some entry level differences between officer and other rank applications, namely for organisational attractiveness analyses but in the main differences did not dominate the data set. Importantly, these significant relationships demonstrate that assumptions often held by recruiting staff about which variables might predict various recruitment outcomes are not always correct. This is especially the case for job acceptance intentions, but also for what might predict organisational attractiveness. RAF careers advisors, for instance, did not predict organisational attractiveness despite their obvious usefulness and yet it might be easy to assume that they would. The results show a more subtle and complex set of predictors than initially hypothesised and furthermore certain attributes such as 'values' were shown to be more prominent than expected.

Contribution to Recruitment Knowledge and Practice

    Social processes framework. This research contributes to the social processes framework within recruitment by giving it credibility within a new environment, namely the UK RAF; especially as it has been identified that social processes have attracted limited research interest and credence (Ryan and Ployhart, 2000). In such an environment the perceptions and attitudes of applicants are vital to ascertain as a successful applicant will be not just accepting a job but a 'way of life'. Clearly,

research to demonstrate the reliability and validity of selection procedures is very

important; but so too is determining which applicant perceptions are significant and

which might predict various outcomes. It is not therefore surprising that the social

process framework has received attention in the Belgium military as well (e.g. Schreurs

et al., 2009). Although there has been increasingly more applicant perceptions research

since 2004, much of which has been published in IJSA (e.g. the role of recruiting

sources, Ryan et al., 2004; social identities and applicant reactions, Herriot, 2004;

applicant attribution reaction theory, Ployhart and Harold, 2004; organisational

socialisation, Cooper-Thomas and Anderson, 2005; symbolic attributes and personality,

Schreurs et al., 2009); it is still a newly burgeoning research area and this research has

focused on reactions to selection processes and not the wider recruitment context. My

research focused instead on this latter context providing an insight into different aspects

of recruitment peripheral to, but as important as, selection testing such as recruitment

sources, familiarity and organisational image.

Anderson (2004) in his editorial for the IJSA stated that it was vital that research

"shed light on hitherto shrouded features of the applicant's 'side' of selection processes"

(p. 1) or as he referred to it "the dark side of the moon" (p. 1). Like other applicant

perceptions research, (e.g. Anderson et al., 2004; Derous and Schreurs, 2009), this

current research contributed to recruitment knowledge by investigating applicant

perceptions from the perspective of the individual not the organisation. In this way the

research was about how the applicants regarded the RAF *not* how the RAF regarded

them. The research shows that recruiters should not make assumptions about what

variables might predict certain recruitment outcomes, and indeed the perceptions of

applicants are often quite subtle. For instance, in this study aspects which might seem

obviously linked, or more specifically likely to be predictors of organisational

attractiveness and job acceptance intentions were not (for instance, RAF careers advisors).

This current study was also important because it was applicant not recruit orientated which is the case for many recruitment source research studies (Breaugh and Starke, 2000); and as such investigated individuals *during* recruitment not afterwards. This meant that the saliency of their perceptions and the ability to recall key accurate information should have been far greater (Pearson, Ross, and Dawes, 1992). Indeed, applicant perception research still relies on the use of undergraduates and postgraduate student participants to simulate applicant attitudes rather than use actual applicants (e.g. Tsai and Yang, 2010).

As aforementioned, by investigating applicant perceptions of recruitment rather that the more specific perceptions of selection and testing, this research considered the particular predictor variable of organisational image (Lievens and Highhouse, 2003). Lievens and Highhouse's (2003) Instrumental-Symbolic organisational image theory has not received a great deal of attention, and so this current study is important in providing empirical support for aspects of their research. Indeed support was found for the symbolic aspects of Lievens and Highhouse's theory; and especially for the significance of symbolic trait like inferences (Slaughter et al., 2004; Lievens et al., 2005). Importantly symbolic aspects of organisational image were the most predictive variables across the study and with a reasonable amount of variance (albeit not consistently across the variables). This finding indicates the potential importance of symbolic information when choosing to apply for a job (and organisation). This is perhaps because applicants see their own attributes reflected in the organisation (Schreurs et al., 2009) and these inferences may well be what differentiates a given organisation from its competitors (Lievens and Highhouse, 2003).

The findings themselves contribute to the understanding and importance of social processes in recruitment by confirming that applicant perceptions are associated and predictive of a number of recruitment outcomes; and indicate that some information and perceptions are more significant at particular parts of the recruitment journey. For instance, information that might be passed to an applicant early on in this journey, such as recruitment sources and early reactions to organisational image, were more predictive of organisational attractiveness than job acceptance intentions. Job characteristics were partially predictive of job acceptance intentions and therefore such information about the nature of the work, benefits and risks of performing a given role etc could well come into play further into the recruitment journey especially regarding decision making (Chapman et al., 2005).

Group differences played a minor role but it was clear that they should not be ignored. For instance, the recruitment sources of TV/Cinema and the RAF careers website were more predictive of other rank perceptions of organisational attractiveness. This might be important as, although not statistically significant, fewer other ranks reported that they knew someone in the RAF or had visited an RAF base as and such may rely much more heavily on recruitment sources. Of course further research would be required to determine the degree of influence of recruitment sources and other forms of prior exposure to the organisation, but there remains a difference in the strength of prediction between the two entry levels.

In summary, not only are applicant perceptions a valid research topic but there is merit in investigating these issues further as much remains unanswered with regard to how various variables are connected and what might cause such perceptions.

Implications for practice. This research has contributed to RAF recruitment and also wider recruitment practice. With regard to the RAF specifically, the study was

conducted to inform both recruitment implementation and wider recruitment strategy. The research has contributed in confirming that the image portrayed by the RAF in a range of recruitment and information sources is readily identifiable and recognised by applicants in a positive light (Collins and Han, 2004). This was reflected in the high organisational attractiveness and job acceptance intentions scores, and also the reasons to apply to join. It is important to determine which reasons to apply are important so that recruiters have an accurate picture of the range of reasons but also to determine if particular information might not be correctly conveyed to potential applicants and subsequently it poorly informs their perceptions or decisions. Recruitment sources, whether they be text based (e.g. RAF careers website, brochures) or face to face interaction (e.g. RAF careers advisors) are regarded as highly useful and may well shape organisational attractiveness (some more than others) and the impression that applicants make about the RAF (Barber and Roehling, 1993). A recognisable and attractive organisational image is crucial given the costs of recruiting and advertising. Importantly, this research has highlighted that there are differences in the usefulness of various recruitment sources by entry level and in particular that recruitment sources are rated as more useful by other rank applicants than by officers. It appears that the former may well rely more heavily on such material, as they are also less likely to be familiar with the RAF through prior exposure to the organisation. This is an important finding as it could mean that other ranks are more likely to respond to formal advertising and recruitment sources and as a result are more likely to receive (in many cases) detailed and unambiguous information (Barber and Roehling, 1993). But in addition other ranks often will not obtain informal information which might inform their pre-entry expectations and may not have RJPs (Phillips, 1998). The RAF may need to consider what benefits familiarity and prior exposure do provide as these were not predictive of

recruitment outcomes. However, the fact that more officer applicants know someone in the RAF and have visited an RAF base is likely to be important and it may be necessary to harness these experiences and extend them to other rank applicants. Whilst familiarity was not significant for the study variables it is unlikely that it has no influence or at least association, with for instance pre-socialisation expectations (Lester et al., 2001).

This study has emphasised the value of particular recruitment sources in predicting organisational attractiveness perceptions, such as the RAF careers website which is an ideal medium for providing detailed and unambiguous information, and conveying a consistent message (Highhouse and Hause, 1995). In addition, the website can reach a wide ranging audience some of whom may only have been 'surfing' and indirectly found the RAF website; it can be quickly updated and refreshed; and importantly it is likely many young people's first port of call when looking for or researching jobs is the internet, and clearly the RAF is portraying a positive organisational image via this medium. Interestingly, whilst the information provided on the RAF careers website was a predictor of organisational attractiveness, it was not predictive of job acceptance intentions. Although this research did not demonstrate the actual influence of recruitment information, it is possible that RAF recruitment sources may be limited to influencing the decision to apply but not to the later decision of whether to accept a job offer.

Symbolic attributes or trait like qualities could be an important marketing tool to help potential applicants differentiate between similar organisations (Lievens and Highhouse, 2003). Indeed, although the RAF on the surface might appear unique it still falls under several umbrella types of organisation, for example, the military/defence (including the Army and Royal Navy), public sector (including other public servants

such as Ministry of Defence employees), and uniformed services (including police and fire service, for instance). Focusing on the 'personality features' of the RAF could help both enquirers and applicants to the RAF differentiate the organisation from others, and in doing so help applicants decide between alternative employers (Highhouse, Thornbury and Little, 2007). As aforementioned, Schreurs et al. (2009) concluded that individuals identify with organisations that have similar characteristics to those they feel they possess. This is crucial for the RAF to understand, because it could widen their recruitment pool, as a greater number of individuals (not just the 'typical' applicant, i.e. white, male, under age of 21) may identify with symbolic characteristics of being exciting, caring and prestigious (Ryan and Ployhart, 2000).

Finally, the job characteristic sub scale of values was a significant predictor of both organisational attractiveness and intention to accept a job offer for the first choice role. Like, symbolic attributes, values differentiate an organisation such as the RAF from other organisations including those which might be similar in terms of public service for instance. To have applicants that readily espouse to and are attracted to its organisational values is a very important finding for the RAF. It demonstrates that its core values and ethos, such as respect, loyalty and service, do not dissuade applicants from applying and consequently their recruitment information should continue to reflect these important aspects of organisational culture. Secondly, this finding may be contrary to popular thinking that young people (i.e. of the age range of RAF applicants) are not likely to share such values; or indeed that there may be issue with pre-entry expectations where subsequent recruits feel at ease with organisational values. Furthermore, there were no significant group differences for this finding indicating that there are no potential entry level issues regarding values and ethos which require attention. In summary, as a result of this research I would recommend to the RAF that

they continue to utilise a range of recruitment sources but focus attention, effort and

funding on the three sources which are regarded to be most useful and provide most

information, namely, brochures, the RAF careers website and RAF careers advisors, and

also pay attention to the value TV/Cinema adverts in predicting organisational

attractiveness. Whilst familiarity and prior knowledge of the RAF was not predictive of

either dependent variable I recommend that more research is conducted to determine its

value especially as more officer applicants have prior exposure to the organisation. I

recommend that the symbolic attributes of organisational image are exploited within the

popular and useful recruitment sources as these are again predictive of organisational

attractiveness and job acceptance intentions. Finally, I recommend that information

about organisational values is also exploited within the recruitment sources as these job

characteristics were also predictive of organisational attractiveness and job acceptance

intentions.

　　　　With regard to wider recruitment practice, this study has contributed by

demonstrating that the perceptions of applicants merit acknowledgement as these can

predict various recruitment outcomes; but also that assumptions about what an applicant

regards as useful or important may not ne accurate. If this is the case then recruiters

must be careful not to make recruitment decisions, for instance the dissemination of

recruitment material, without investigation of its value and impact. Certainly, as this

study has shown, different variables predict different recruitment outcomes and so there

may well be a need to provide varying input and information throughout the recruitment

process. For example, as recruitment information predicts organisational attractiveness

then this is likely to be more important during early rather than later decision making,

that is, when deciding to apply. Decisions, such as job acceptance, are more likely to be

based on job related information and so, as Chapman et al. (2005) proposed, additional

information may be required at this point in the recruitment process.

Limitations of Present Research and Opportunities for Future Research

This study had a number of limitations which affect the generalisation of the

findings and which could be addressed in future research. To begin with the qualitative

study was used as a precursor to developing the quantitative questionnaire but could

have been designed to more directly supplement the quantitative findings. Indeed the

use of laddering interviews elicited a wealth of information was not adequately

exploited for this study. The attributes conveyed in the laddering interviews informed

the quantitative phase of the study and it is recommended that future research on

applicant perceptions also incorporates a qualitative phase to better appreciate the target

population. However the underlying value information which was derived from these

interviews could not be satisfactorily utilised because the nature of the study was on

applicant perceptions not deeper motivations; in addition the values derived did not lend

themselves well to a quantitative examination. Future research could also tap

underlying motives or even implicit attitudes, that is, more automatic attitudes rather

than deliberate and reflective explicit attitudes (Rudman, 2004).

This could again employ a laddering methodology, but there would need to be a

clear approach to determining how to capitalise on the information collated from these

interviews, and one suggestion would be to attempt to track participants from

application through to organisational entry to determine if their values are being

achieved. Such a study would explicitly acknowledge that although these attitudes may

be formed during recruitment and selection they have a long term impact. Further

research could also track participants over time to verify behavioural outcomes.

One limitation of the research was its inability to determine whether the job

acceptance intentions of the applicants accurately portrayed their actual decision making

and behaviour. However, Maurer et al. (1992) cited research by Sheppard, Hartwick, and Warshaw (1988) which showed intentions and actual behaviour to be highly correlated. A longitudinal design which tracked applicants could have addressed this shortcoming.

In general, by being of an exploratory nature this study proposed that there were a number of possible relationships between the different study variables and this reflected the complexity of the recruitment process (Breaugh and Starke, 2000). As the study was exploratory, it relied heavily on correlations and regression analysis to show the relationships between factors. Caution must therefore be exercised in interpreting the results regarding assumptions of causality. Certainly there may well have been the interaction of mediating variables (e.g. Turban, 2001) which influenced factors more directly. Further research to determine causation is warranted.

A more focused approach would be acceptable for future studies, that is, to either investigate one area of applicant perceptions at a time (e.g. Rynes and Boudreau, 1986), or to determine whether relationships between factors are direct or indirect; for instance do recruitment sources influence organisational attractiveness directly or do organisation image perceptions play a mediating role. Furthermore, whilst some recruitment sources were revealed to be more usefulness than others this can only be speculated as to why this might be the case (Gatewood et al., 1993).

The research itself relied on self reports of which, as Cooper-Thomas and Anderson (2005) argue, subjective measures are common for attitudinal research and indeed this study was concerned with how applicants perceived the RAF not an assessment which could have been achieved via a third party (Bauer and Green, 1994). However, self reports are still criticised as being subjective (Ashforth and Saks, 1996) and subject to over-inflation as a result of social desirability, where the participants

intentionally try to show themselves in a positive light; in this case, as someone suitable for a job with the RAF. It is also possible that individuals in this study rated the items positively in a need to self-justify their attitudes and decisions. This would be in accord with social processing theory (Thomas and Griffin, 1983); however, the use of self-administered and anonymous surveys have been found to reduce social desirability. In this way participants do not need or do not feel pressurised by the environment to project a socially desirable or acceptable impression (Nederhof, 1985) and therefore this may have counteracted this concern. Indeed Turban (2001) stated that whilst there are likely to be inflated scores for applicants because they are intent on projecting a positive self image, the pattern of responses revealed are unlikely to be different. Therefore, future research should continue to use self-report, self-administered questionnaires but take care to explicitly address the potential for social desirability with appropriately worded items and, unlike this study, space for respondents to explain their reasoning for their response. A discourse analysis could then be used to examine the qualitative detail and determine if social desirability has occurred.

It is suggested that applicants for the RAF were not speculative and therefore the respondents were genuinely interested in a job with the RAF. This motivation may not be as strong for other organisations and therefore, again, social desirability may not be an issue. Future research could expand the sample to include enquirers as well as applicants. It is proposed that applicants have a more vested interest in pursuing their application (Rynes and Boudreau, 1986) than a general enquirer and this suggests that their perceptions may differ; in addition it is proposed that enquirers will be less likely to provide socially desirable responses. Finally, this research could be repeated with another set of RAF applicants to compare results, or a different applicant reference group to determine the differences between groups. For instance, does the type of

organisation influence organisational image perceptions; do recruitment sources

prediction organisational attractiveness for other groups of applicants; and is familiarity

more predictive for them?

Conclusion

My research reflected the occupational psychology team's attempt to adopt new

ways of working; in this instance, applying new theoretical frameworks and trialling

new methodology. Opportunities to develop new ways of working came about through

organisational change and were facilitated by my studies. By considering the social

processes framework, and specifically applicant perceptions, my research was designed

to scientifically and robustly investigate RAF recruitment from the perspective of the

applicant; and yet do so in a bespoke manner appropriate to RAF stakeholder needs in

order to competently *inform decisions to influence change.* This research was

commissioned to understand individuals' motivations to apply to join the RAF; how the

RAF is viewed by applicants; and understand potential recruitment outcomes; with a

view to informing both recruitment delivery and strategy.

To conclude, in conducting this study I aimed to provide research grounded in

the theoretical framework of applicant perceptions so that I could deliver both practical

recommendations and contribute to the further understanding of social processes in

recruitment. My findings present a complex yet subtle picture of applicant perceptions,

revealing the presence and absence of relationships between the predictor variables of

usefulness of recruitment sources, familiarity with and prior exposure to the RAF,

instrumental and symbolic organisational image, job characteristics; and the dependent

variables of organisational attractiveness and job acceptance intentions.

My findings were broadly consistent with previous research and theoretical

frameworks including Lievens and Highhouse's (2003) instrumental and symbolic

organisational image. The findings themselves support the proposition that applicant perceptions as social processes in recruitment and selection are important areas for research. For example, applicant perceptions predict recruitment outcomes in this case organisational attractiveness, and job acceptance intentions. My findings contribute to applicant perception knowledge by confirming the continued value of investigating symbolic organisational image and issues such as organisational values, and their positive association to the recruitment outcomes of organisational attractiveness and job acceptance. In terms of recruitment practice, my research will benefit the RAF in focusing their recruitment information effort, as well as showing them how they can emphasise their point of differentiate from alternative employers. With regard to wider recruitment practice, my research again highlights the importance of considering the relationship of applicant perceptions to outcomes and that some perceptions are more predictive of outcomes than others.

Neglecting the validity of applicant perceptions as a concept in research could mean a failure to properly understand the sources of these perceptions (and for organisations to enhance or ameliorate them as appropriate), but also neglecting the applicant's perspective is a gamble for organisations during the war for talent (Schreurs and Lescreve, 2001). Whilst applicant perceptions research is gaining momentum much of the research remains related to selection perceptions, and so my research has expanded the field by focusing on wider recruitment perceptions. My study provides a basis for more detailed future research which should not ignore the inherent complexity of the recruitment process and which should begin to investigate causality and more direct relationships between variables.

Chapter 6: Epilogue

This epilogue presents my reflections and deliberations regarding my practitioner doctorate journey. It, in many ways, mirrors the prologue and is organised in a similar manner, although additional insights are added.

Motivation to undertake the professional doctorate

My first set of reflections relate to my motivation to undertake the professional doctorate.

Professional development. The motivation to study was initially a professional development opportunity. The programme has provided a platform from which I have been able to develop my competence and skills set. I wanted to cover aspects of all the NOS for psychology Key roles including learning new skills, improving current skills, applying and sharing this learning. I include in this list, case study methodology, conducting evaluations, lateral thinking, and higher order problem solving (linked to NOS Key Roles 1, 2 & 3). Also the doctorate has helped encourage me to create a learning climate at work, where I discuss my research findings, or introduce new academic research to colleagues (NOS Key Role 5).

Certainly, the doctorate has broadened my outlook in terms of the knowledge I have gained and my renewed appreciation for academic research providing intellectual challenge and development. I deliberately chose topics from areas in organisational psychology which receive less or limited theoretical and research attention, and these included emotions during radical change, homeworking evaluation, environmental scanning and social processes in recruitment. I hoped that I would develop new knowledge and learning in these areas, and also maintain my interest over the duration of the programme. Indeed, these topics have re-invigorated my interest in occupational

psychology because they represent new avenues and opportunities for occupational

psychology. Crucially, the doctorate has improved my work practice in terms of

dissemination of research, advice and consultancy (NOS Key Role 4) and the provision

of these services, namely provision of information to support decision making (NOS

Key Role 6) by giving me the skills and confidence to collect, analyse and present

evidence.

Academic rigour. I also undertook the doctorate as an opportunity to bring

additional academic rigour and structure to my work. I hope that I have achieved this

objective although I have still had the issue of balancing the rigours of academic of

research with the practical realities of research in the workplace (e.g. Hodgkinson et al.,

2001). For instance, the empirical project would have been greatly enhanced by a

longitudinal rather than cross-sectional design, or some form of triangulation. However,

this design was not possible and highlighted the void between research preferences and

practical realities, or even organisational needs. However, I hope that within the

pragmatic solutions I have adopted, my research has been grounded in the principles of

good science.

Applied research. Whilst I wished to apply rigour and the principles of good

science, conducting research I was always cognisant that the research was conducted in

an applied setting and the constraints that this can pose; such as meeting client needs,

resource implications, access to participants and time limitations. I do, however, feel

that the doctorate has helped me bridge the academic-practitioner divide (Cascio and

Aguinis, 2008). That said, I would add that my research has always been guided by

practicalities, the need to provide an output, and seek outcomes which are of utility in

an applied setting. I feel that I have contributed to furthering the body of knowledge in

the field of occupational and organisational psychology, but my motivation was for improving my working practice as well as contributing to knowledge.

     Exploration. My final objective was to use the doctorate as an opportunity to explore more closely and better understand organisational processes in a bottom up and inductive manner. It is fair to say that at the commencement of my doctorate this concept was not well developed in my mind and was a reason why I did not apply classic grounded theory (Glaser and Strauss, 1967) as a methodology. However, the aspect of the doctorate that I particularly enjoyed was developing the tactic of exploring and observing the social environment and then labelling and categorising this data, before determining the themes, relationships and associations between these categories (Eisenhardt and Graebner, 2007). This is also perhaps the major learning experience of the research I will take away and apply to my work practice. I am drawn to inductive research because I am not constrained by testing a limited number of relationships. I believe I have used the approach to good effect by developing models of organisational concepts which have implications for real world practice (Hambrick, 1994). I am aware though that some of my research has lacked focus at times, and significantly I may have neglected opportunities to test organisational theory in a work setting.

Overarching Theme

     My second reflection relates to the overarching theme: *informing decisions to influence change: the changing role of an in-house practitioner* which I proposed would run through my research and my doctoral thesis, and this was a deliberate decision to choose an eclectic approach. However, it would have been far easier and potentially less time consuming (for instance, in literature collation and reviewing) to have explored one area of psychology such as job satisfaction or turnover, and to have connected the four research elements to this topic. This is not perhaps surprising, but

nevertheless the approach caused me difficulty, in particular in demonstrating each component's connection to the theme.

The theme was chosen as a deliberate and genuine attempt at professional introspection. This doctorate has afforded me the time to step back from what we do in OPT, how we operate, what we produce, why we produce it and how we are regarded; and consequently conduct some professional introspection. These issues are important for any team to consider but this introspection is sometimes difficult to conduct either because of time pressures or a resistance to open the team up to critique. Clearly the radical change event was the catalyst for this review, but I was able to capitalise on my studies to conduct a thorough and objective exploration of the team. For instance, the issues of team identity (identified in the case study) were not apparent until I analysed the data, but in reviewing the findings with colleagues they agreed with this outcome and also that they too had not noticed the extent of their journey up to that point. The strap line *informing decisions to influence change* aptly describes what OPT seeks to achieve for its stakeholders. Therefore research must produce high quality evidence to inform and guide decision making, and also offer practical solutions as to how apply the evidence. Never more so has there been a clear need to demonstrate value for money and competently deliver a valued service.

New ways of working. I introduced in the prologue the issue of new ways of working. Adapting the team's approach was partly a necessity arising from organisational change, and also the need to develop professionally. Perhaps not explicitly stated, but this thesis has presented a number of new ways of working for OPT. For example, the integration of the psychology team into the policy (and later strategy) directorate (described in the case study) marked a departure from traditional team structuring, especially with the advent of military instead of civilian line

management. The implementation of hybrid homeworking was another example of new ways of working (described in the intervention programme). This work approach has, and continues, to have an impact on the whole team (both positively and negatively). In Chapters 4 and 5 I provided examples of new ways of working with regard to the conduct of research. I lead the team's environmental scanning effort, and it is an approach which we have had to learn to use in the absence of any in-house assistance or external funding. Context, both within the RAF and in wider society, is vital to collate and interpret as it has bearings on information collected internally (described in the critical literature review). For instance, the consideration of financial retention incentives for pilots will be influenced by the buoyancy of airline recruiting and the cost of obtaining appropriate licences in order to leave to join an airline. The conduct of environmental scanning is therefore an important and necessary addition to the skills set for me as an experienced practitioner and for other members of OPT. Finally, the investigation of applicant perceptions (described in the empirical project) was an example of the expansion of skills (e.g. MEC theory and laddering interviews) and the use of new knowledge facilitated in this instance by my studies. Furthermore, access to new developments in the recruitment field assisted with the development of the research approach and research measures.

Of course having a catchy strap line and motivation to improve services may still not deliver adequate change and the desired effect. As highlighted in the case study, OPT's services have grown in confidence and so too have the plaudits. A quote from the occupational psychology team Commendation from the RAF's HQ Commander in Chief, promulgated with the New Year's Honours List, perhaps sums this up: "In the face of the resultant personal and professional upheaval, Team members have demonstrated exceptional resolve, determination and dedication to duty, and their

ability to deliver high quality research analysis has remained undiminished. Consequently, they quickly established their credentials in HQ Air, where they continue to enjoy an enviable reputation for absolute professionalism and effectiveness, and for undertaking research with integrity, sensitivity and empathy."

Individual Components

My third set of reflections relate to the four individual components of the doctorate: the Organisational Case Study, the Intervention Programme, the Critical Literature Review, and the Empirical Project. I treated each research component as a separate chapter which told distinct but connected stories. I presented the chapters in a deliberate order to reflect the journey of the developing role of the in-house practitioner. The first aspect was to understand the organisational change which OPT experienced and which set us on the journey to develop our services (the case study); this radical organisational change was subsequently followed by changes to the team's way of working when two members became homeworkers (the intervention programme). Once this foundation was established the team was able to expand its sphere of competence and output; two areas which were developed were environmental scanning capability (the critical literature review) and the opportunity to apply theoretical advances and novel methodologies to workplace problems (the empirical project).

Chapter 2 - an organisational case study. As an in-house practitioner I do not have opportunity to conduct case studies; which is a reflection of reliance on and stakeholder preference for quantitative research methods. However, my doctoral case study was an opportunity to observe events and reactions as they unfolded, and to investigate organisational change in action. Furthermore, the case study was an ideal opportunity for professional introspection and was a catalyst for my team's continual development. It is possible that without the initial radical change event, timely and

appropriate team transformation would not have occurred and it would almost certainly not have resulted in a more aligned and strategic occupational psychology team. The main reason for this was related to the ethos of radical change, that is, frame bending and a break from previous mind sets.

Whilst case studies are criticised for a lack of generalisability, because of the subject matter I feel confident in making generalisations to other change contexts; especially with regard to the conditions necessary for successful radical change including strong, decisive leadership, allowing staff the time and space to express emotions, and nurturing staff through the medium and long term. This case study has shown that successful change requires personnel and managers to be committed over a long period of change even if the trigger events are swift; often the repercussions and subsequent transformation are not. Finally, this case study has shown that in addition to the organisational changes which took place, the occupational psychology team experienced many positive outcomes including emotional re-balancing, renewed organisational loyalty and a stronger sense of professional identity.

Chapter 3 - an intervention programme. My Intervention Programme was itself a longitudinal case study, albeit the proposed outcome was clearly defined at the outset (i.e. the implementation of homeworking process). I demonstrated that such as undertaking requires careful planning and consideration of potential issues; but even so unforeseen problems are always possible such as complacency after the initial successful implementation. In researching homeworking, and the wider practice of teleworking and remote working, I noted that there are a range of advantages and disadvantages for both the individual and the organisation, and these are not have not generally been considered in their entirely in the literature. Significantly, I demonstrated that issues which have been raised by researchers such as the importance

of hybrid working, or consideration of office based workers are very much valid in real-world situations and should merit further investigation. My intervention was initially to plan and set up homeworking, but it was clear that ongoing evaluation was a key aspect of ensuring continual success of the process for all concerned. This lead me to develop a model for successful homeworking implementation, including six necessary conditions. These are valuable guidelines for other practitioners considering how to set up and evaluate homeworking as these are based on experience and systematic review.

Chapter 4 - a critical literature review. I chose the subject matter for the Critical Literature Review because OPT has been developing its environmental scanning techniques and as the lead for these efforts, an understanding of the literature was vital to inform my work practice. I also chose to tackle the literature review in a less conventional way by comparing the literature against two related questions – how can occupational psychology help environmental scanning, and how can environmental scanning help occupational psychology. I did this as not to provide a straightforward critique of the environmental scanning literature but to stimulate debate as to whether the premises I proposed are appropriate and valid, and if so how might they be implemented. I believe that environmental scanning and occupational psychology can have a mutually beneficial relationship where occupational psychologists can improve managers' practice of environmental scanning; and environmental scanning can be the vehicle for occupational psychologists to better understand the external context.

Chapter 5 - an empirical project. My Empirical Project constituted the large element of my doctorate and provided opportunities for both qualitative and quantitative study. A bespoke questionnaire was designed to test the formulated hypotheses and to investigate which variables might predict the recruitment outcomes of organisational attractiveness and job acceptance intentions. My research contributes to both

knowledge and practice by providing a new environment in which to test applicant

perception theory. It also expands the field by considered a range of recruitment

perceptions rather than applicant perception of selection which has been the main focus

of recent research (Hulsheger and Anderson, 2009). Specifically, my research supports

the importance of less tangible organisational information such as symbolic

organisational image and organisational values as these perceptions were predictive of

both organisational attractiveness and job acceptance intentions. Significantly, my

research participants were actual applicants currently experiencing the recruitment

process rather than students or recent recruits as is common in applicant perception

research (Breaugh and Starke, 2000; Tsai and Yang, 2010). Finally, my research has

again demonstrated the validity of appreciating recruitment from the perspective of the

applicant and not just the organisation and to help as Anderson (2004) hoped to "shed

light on hitherto shrouded features of the applicant's 'side'" (p. 1).

Overall Contribution

An objective of the London Metropolitan University Professional Doctorate is

the generation of academic knowledge and also practical knowledge applicable to other

occupational psychologists. Overall my research has contributed in two main ways.

Firstly, my research explored several relatively novel or under-utilised theories, such as

radical change and social processes approach to recruitment, and provided support for

these theoretical frameworks within real-world environments. Secondly, my findings

have been used as the basis for determining practical implications and solutions such as

homeworking guidelines or the utility of environmental scanning which fellow

practitioners can adopt and adapt. Therefore, my doctorate has achieved the aims to

generate new academic knowledge which can contribute to the wider body of

occupational psychology research knowledge; and it has contributed by providing

practical knowledge which can be applied by other occupational psychologists.

Final Conclusions

Occupational psychology is about improving the effectiveness, efficiency and

wellbeing of individuals in organisational settings (OP - FIRST, 2006), and sometimes

this includes the very psychologists charged with this undertaking. The services that

occupational psychologists deliver may not be optimal either because of their approach

to work or organisational constraints. I would argue it is not well known whether those

tasked to improve the organisational functioning of others actually conduct adequate

self-analysis and professional introspection. It is clear that training, supervision, CPD,

further study and regulation provide mechanisms encourage, compel and monitor

progression and development, but how much does this improve the final outcome, that

is, the provision of occupational psychology services? The occupational psychology

team which was introduced in this doctorate found themselves in the midst of radical

organisational change just as many other employees do, but through their experience,

and facilitated by my doctoral studies, were able to capitalise on events to improve the

delivery of their services. It is a shame, but perhaps endemic within the occupational

psychology community, that it takes a 'shock' to initiate professional introspection

which crucially in this case also initiated action. As a postscript to this doctorate,

although the formal monitoring of the case study has concluded, the team have

continued to develop and instead of responding to their circumstances have tried to pre-

empt likely issues. This has been no less the case with the recession and the squeeze on

public services. Whilst the team did not predict the recession, they have been able to

judge likely reactions and conducted a market test to demonstrate their value. Within

this market test they were able to provide evidence of their organic structure and their ability to respond to organisational needs.

Within this doctoral thesis I have presented four research components which were all conducted with the premise of *informing decisions to influence change*. Whilst the research vaired enormously and met different needs for different stakeholders the underlying theme ran through all these components. My research has covered a range of occupational psychology domains including organisational change, recruitment and working practices and has investigated ideas and theories not well-researched in their fields. By doing so I have attempted to broaden both my own knowledge base and that of my colleagues, as well as contribute to the wider body of occupational knowledge through conducting research. My professional doctorate was also a journey charting the changing role of occupational psychology practitioners, again at an individual and a team level; and perhaps a profession level in opening a debate about what occupational psychology should be interested in. In summary, I believe that the occupational psychology team and I have had a successful if not bumpy journey although, in the true sense of continual development, one which is not yet over.

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Appendix A: *Key Roles and Units of National Occupational Standards for Psychology*

to Develop Through Doctorate

Table A.1

National Occupational Standards

Role	Unit	Notes
Key Role 1: Develop, implement and maintain personal and professional standards and ethical practice	**Unit 1.3** Contribute to the continuing development of oneself as a professional occupational psychologist.	CPD specifically: *1.3.4 Develop and enhance oneself as a psychological practitioner.*
	Unit 1.4 Respond to unpredictable contexts and events professionally and ethically.	Development & use of environmental scanning to assist this process which itself meets: *1.4.3 Apply creative and innovative techniques, principles and solutions to psychological practice.*
	Unit 1.5 Formulate developments in legal, ethical and professional standards in occupational psychology.	Understanding the change process for own working group (OPT) provides the basis for this.
Key Role 2: Apply psychological and related methods, concepts, models, theories and knowledge derived from reproducible research findings	**Unit 2.1** Establish requirements for and benefits of occupational psychology. **Unit 2.2** Plan applications of occupational psychology. **Unit 2.3** Establish, develop and maintain working relationships with clients. **Unit 2.4** Conduct applications of occupational psychology. **Unit 2.5** Direct the implementation of applications of occupational psychology.	Ongoing psychological practice.
	Unit 2.6 Monitor the implementation of the applications of occupational psychology. **Unit 2.7** Evaluate the impact of the applications of occupational psychology.	Develop better approaches to monitor & evaluate (especially in relation to homeworking implementation).
Key Role 3: Research and develop new and existing psychological methods, concepts, models, theories and instruments in occupational psychology	**Unit 3.1** Design psychological research activities. **Unit 3.4** Initiate and develop psychological research and knowledge. **Unit 3.2** Conduct psychological research activities. **Unit 3.3** Analyse and evaluate psychological research data.	Specifically: *3.1.1 Generate ideas for specific psychological research;* and *3.4.1 Identify areas of occupational psychology that offer development opportunities.* Specifically use of new and alternative research methods and analysis.
	Unit 3.5 Produce and evaluate original psychological research and knowledge.	Specifically: *3.5.1 Conduct research to advance existing methods, models, theories, instruments and understanding in occupational psychology.*

Appendix A (Continued)

Table A.1 (continued)

Key Role 4: Communicate psychological knowledge, principles, methods, needs and policy requirements	**Unit 4.1** Promote psychological principles, practices, services and benefits. **Unit 4.2** Provide psychological advice and guidance to others and facilitate the use of psychological services. **Unit 4.3** Provide psychological advice to aid policy decision making. **Unit 4.4** Communicate the processes and outcomes of psychological and other applications and developments. **Unit 4.5** Disseminate psychological knowledge to address current issues in society. **Unit 4.6** Prepare and present evidence in formal settings. **Unit 4.7** Provide expert psychological opinion to informal information requests. **Unit 4.8** Provide feedback to clients.	Seek & develop opportunities for dissemination in variety of media & to different audiences.
Key Role 5: Develop and train the application of psychological skills, knowledge, practices and procedures	**Unit 5.13** Create a climate that promotes learning	By undergoing own CPD & by undertaking doctorate demonstrate to other importance of and opportunities derived from further study. Use of doctorate for basis of learning discussions.
Key Role 6: Manage the provision of psychological systems, services and resources	**Unit 6.2** Contribute to improvements at work **Unit 6.5** Develop your own resources **Unit 6.6** Develop productive working relationships **Unit 6.7** Select personnel for activities **Unit 6.8** Develop teams and individuals to enhance performance **Unit 6.9** Manage the performance of teams and individuals **Unit 6.10** Respond to poor performance in the team **Unit 6.12** Provide information to support decision-making	Understanding the change process for own working group (OPT) provides the basis for this. CPD Understanding the change process for own working group (OPT) provides the basis for this. Essence of my work and the thread through the doctorate – informing decisions.

Appendix B: *Organisational Case Study – Examples of Four Data Collation Products*

Example of a Loose Minute from the Portfolio of Key Documents (collation of

documentation and records)

Loose minute from Psych staff to RAF Staff charged with implementing reorganisation

Dated 20 Apr 04

Psychology project management and titles

P

Thanks for sight of your note to DDP(E) and DDP(T&R) re integration of Res&MI staffs into existing management structures. The Res&MI C1s are broadly happy with the proposal but want to flag the following points:

     a.   Whilst we agree that we may need arbitration in terms of prioritisation of our workload, in this case through SO1 Pers Strategy, we are concerned that the functions chart suggests/proposes that this replaces HD Pers Res's function directly. Although we welcome line management through one chain of command ie DDP(E), we see SO1 Pers Strategy as filtering and monitoring the work as it comes from DP&T Pol or outside, not controlling our workload directly. Perhaps a dotted line connecting the psychology staff and SO1 Pers Strategy would be more appropriate.

     b.   In relation to new post titles, we discounted the titles Research 1, Research 2 and Research 3 because the already exist in PTC. We did not discount the term 'Psych' although 'Psycho' is an unfortunate extension! We would welcome new post titles and not the retention of existing ones which do nothing for integration and indeed suggest professional division lines which are not appropriate. We favour Psych 1, Psych 2, Psych 3, followed by Psych 1a, Psych 2a, Psych 3a, and Psych Student.

     c.   We will be able to move to Room F97b (integrating the Store room F95 as part of the new office) only if we are able to move the library resource currently in F95 to F107a (currently occupied by SO1 Trg Res 1 and SO1 Pers Res 2. this room can be used as a meeting room and learning resource providing all D P&T Pol staff with access to archived materials. This however is being offering up in the re-organisation.

     d.   Finally, please note the spelling of the terms 'Psych' on the functional chart is spelt incorrectly.

N

Appendix B (Continued)

Example Structured Diary Entry (direct and participant observations)

Extract regarding return to work after Easter break just before which the trigger event occurred

Dated 14 Apr 04

......
Returned to work Tuesday after Easter.

Spent a lot of time over Easter wondering if this is the beginning of the end of the team – start at the top and then find ways to remove more staff systematically over time? Decided that I would request a meeting with the Air Cdre at soon as possible – in an attempt to gain clarity as still not sure this the team is safe. Feeling nervous about this – haven't had much interaction or dealings with him – Snr Prin and Prin are the conduits to the directorate management. I will arrange with the Air Cdre's PS to see him ASAP.

Will talk to * about this and if she wants to come as well. Will basically ask him about his plans for the team and how safe our jobs are. Still feel a stunned but need clarity and this is the overriding motivation. * seems angry and uncertain (note - *will ask her about this*). Rest of the team seem relatively nonplussed but that might be because most are leaving anyway (*note – need to verify their feelings*). Nervous about seeing * and *, but think * is still on leave. * is really really upset and angry (fuming). She thinks she can overturn the decisions at least for her job but I'm not so sure.

Spoke with the Air Cdre – he actually said "Was waiting for you to come and see me" – he's barely had any interaction with the C1s – do we have a reputation? Perhaps not such a bad thing. He was surprisingly reassuring (well for the rest of the team – not for * and *). With regard to job security and the future – he said as much as he could be sure and he staked his pension on it (and that's a decent amount) – we'd be ok (obviously a potential move to High Wycombe may change things). He talked about how much he valued the output of the team but also their perspective on personnel policy – challenging, finding evidence, conducting research and always helping. He obviously has a plan because he wants to see us better integrated with the rest of the policy team so that they get better use of our services and also immediate access to psychological evidence and advice. To this end it is likely that he'll want us to move in with RAF colleagues but hasn't got definite plans and he's not worked out the details but he believes that he could not have achieved this integration and better utilisation of the team with the B grade layer – I suppose he was being candid. ....

*Note: * in place of individuals' names*

Appendix B (Continued)

Example of Qualitative Database (two stakeholder surveys)

Table B.1

Summary of Questionnaire Responses (Case Study)

Questions	Combined Psych team response	Combined DPTS stakeholder response
Do you tend to work with one or several members of the occupational psychology team?	• NA	• Several
What do you think is the most useful service we currently provide DPTS?	• Research	• Use of evidence • Independent data • Analysed data
What one piece of work that you have worked on stands out for you?	• Variety of projects • Response depends on individual psychologist (and their projects)	• Variety of projects • Airmen Identity Study • CGAS • Social Vision • SLT questionnaire • Community Support work
What do you see as the key strengths of our team?	• Perspective • Alternative and unbiased • Expertise in occupational psychology • Approach • Can do attitude	• Outside perspective • Independence • Expertise • Alternative points of view • Knowledge • Continuity
How do you think we have contributed to the functioning of DPTS?	• Alternative & challenging perspective • Ability to highlight consequences • Provision of evidence • Information and interpretation	• Alternative perspective • Independence • Contribute to DPTS high reputation
What do you see as the key weaknesses of our team?	• Influence • Ability to influence change, 'make a difference' • Staffing • Variable teamwork • Team issues	• Visibility in general • Visibility of what psychs do • Visibility of what psychs find
What one thing would you change about the service provided by our team?	• Influence change • Demonstrate can make a difference with data • Efficiency • More efficient as team	• Various • Shadow billing • User friendly formats • B2 lead
What else would you like us to offer in terms of a psychological service?	• Influence • Direct advice future focused	• More human factors • More solutions

Appendix B (Continued)

Example of Context Map Entry (summary of key dates, events, players, actions and issues mapped onto diary observations)

Date & context	Event	Key players	Emotional responses & attitudes	Issues	Additional information
14 Apr 04					
Return to work after Easter and the disbandment announcement	C1s met with 1* to ask about own job security and future plans for the team. C1s discuss their feelings and their thoughts on the future.	C1s Snr Prin & Prin 1*	C1: Anger (for way decision made, and outcome for colleagues). C1s: Nervous about future. Nervous meeting with the 1* (not much interaction with him prior to this). C1s: Feeling reassured after meeting. 1*: Not surprised that C1s approached him to get his point of view. Confident about short term future. Unconcerned not have all details yet.	How to implement the change? What will the new structure look like? The Snr Prin & Prin to remain in post until found alternative MOD posts, however, concurrently the remaining psych team will look to implement change and integration properly into DP&T Pol.	Comment by 1* regarding value of the team, and how more interaction with RAF colleagues would facilitate a better, more useful psychology service and by being embedded

Appendix C: *Intervention Programme – Example of Homeworking Implementation Issues Log*

Example of Homeworking Implementation Issues Log

Date	Activity	Issue	Action
Dec 2005	Confirm line management support.	Have verbal agreement but not know all costs involved?	Depends likely costs; speak to budget manager.
Dec 2005	Determine likely costs.	Difficult to achieve until know requirements and still gathering information on what these are.	Will have to determine likely upper limits of costs including running costs as well as set up costs.
Jan 2006	Obtained DFTS Managed Workstyle service guidance notes	Can't find anyone else in HQ that has used this approach. No formal co-ordinator to assist even though the Managed Workstyle service suggests that it's a one stop shop. The guidance only assists you with regard to Broadband connectivity.	
Feb 2006	Obtained relevant MOD manuals.	There are a range of manuals to digest with different requirements eg Health and safety, security, IT.	Will have to identify different individuals to assist especially with regard to IT requirements.
Mar 2006	Create list of equipment requirements.	Do I need office furniture? What are the H&S implications of not ordering it? What exactly are the security restrictions in terms of locking cabinets & doors?	Need to check manual & find H&S rep. Need to check manual & find IT security assistance.
Mar 2006	IT requirements.	Ordering system can not be accessed until have authorisation. Authorisation difficult to obtain without understanding of costs.	Try again to confirm costs.

Appendix D: *Empirical Project Qualitative Phase Interviews – Participant Information*

Sheet

PROJECT INFORMATION SHEET

Introduction
Please read the following information about the research that you have been asked to participate in. You will have time to ask questions at the start, during and after the interview. You will also be asked to sign a consent form. This is for your protection and allows you to withdraw from the research at any time.

Research Project Title
A study of applicants' and recent recruits' perceptions towards RAF recruitment.

Principal Investigator
Ms Nicola Elliott-Mabey,[18] SO1 Psych 2, Senior Psychologist, DPTS, HQ PTC.

Background information
The RAF Youth and Recruiting strategies support both selection and wider recruitment activities aimed at meeting annual recruiting targets. Recruitment success can, in part, be measured by determining whether recruitment targets have been met and all training slots filled. However, little is understood about applicants' and recent recruits' perceptions of the recruitment and selection process and how this might shape their expectations of the RAF, and their ability to successfully transfer from the civilian world. This is becoming increasing important as the RAF draws down and recruiting targets *are reduced.*

This research, which you have been asked to participate in, *will help answer these* questions. The information will be used to inform Youth and Recruiting Strategies and delivery.

Nature of research
The research will consist of one 45-minute interview in a private room. You will be asked think about 5 reasons why you applied to the RAF, ie what was important to you when you decided to apply? You will then be asked a series of questions about why these reasons were important to you. The interview will be confidential and no individual responses will be discussed directly with RAF personnel.

Use of findings
All **responses will be treated with the strictest confidence** and will be grouped together during analysis; it is themes, not individual responses that are of interest. The responses will be used to understand the underlying reasons why people join the RAF, and also to help design items for a follow up questionnaire. Findings will be analysed and a report compiled in the future. Summaries will be available on request. The information may be submitted as a paper to a scientific journal or presented at a conference.

Point of contact Ms Nicola Elliott-Mabey, SO1 Psych 2, DPTS, HQ PTC. 01452 712612 ext 5533; so1psych2.cos@ptc.raf.mod.uk.

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[18] Ms Elliott-Mabey is an MOD Civil Servant, working for the RAF. She is a Chartered Occupational Psychologist and abides by the Code of Conduct of the British Psychological Society.

Appendix E: *Empirical Project Qualitative Phase Interviews – Participant Voluntary*

Consent Form

VOLUNTARY CONSENT FORM

Research Project Title
A study of applicants' and recent recruits' perceptions towards RAF recruitment.

Principal Investigator
Ms Nicola Elliott-Mabey, SO1 Psych 2, Senior Psychologist, DPTS, HQ PTC.

I hereby volunteer to participate in the above named study. I have read the information provided by the researcher and have had the opportunity to ask questions. All of my questions have been answered fully to my satisfaction. However, I may obtain additional information about the research project at a later stage and have been provided with contact details.

I understand that I will only be required to participate in one session of approximately 45 minutes duration which consists of a face to face interview.

I understand that I am free to refuse to participate and may withdraw my consent without prejudice or hard feelings at any time. Should I withdraw my consent, my participation will cease immediately.

I have been informed that the research findings resulting from my participation in this research project will be used in a research report and maybe submitted as paper to a scientific journal or presented at a conference etc.

Volunteer's Name: Signature:

Date:

Investigator's Name: Nicola Elliott-Mabey   Signature:

Date:

Appendix F: *Empirical Project Qualitative Phase Interviews – MEC Laddering*

Interview Approach

INSTRUCTIONS FOR APPLICANT AND RECRUIT INTERVIEWS

Introduction/Aim: Introduce self and aim of the interview - Investigating applicants and recruits perceptions of the RAF recruitment process.

Consent: Check have read the background information and check whether have any further questions. Sign consent form if happy.

Interview recap: This interview will last about 45 mins. I will ask you to think about and write down 5 reasons why you applied for to the RAF, i.e. what was important to you when you decided to apply. I will then ask you a series of questions about why these reasons were important to you.

Confidentiality: This interview is confidential, your individual responses will not be discussed with staff or other RAF personnel.

> *Example of laddering interview: go through this example*
> Attribute = **career**
>
> State **career** is a reason for applying to RAF
>
> **Interviewer**
> "You stated that career was important as a reason to apply to the RAF. Why is **career** important to you?"
> **Respondent**
> I want to have future prospects?
> **Interviewer**
> Why are prospects important to you?
> **Respondent**
> I want to ensure can climb career ladder?
> **Interviewer**
> Why is climbing the career ladder important to you?
> **Respondent**
> I want recognition for what I do.
> Keep going until can't think of another reason.

Laddering procedure:
1. Ask participant to think about 5 attributes that were important in deciding to apply for the RAF.
2. Get them to write attributes on individual cards and lay these out in front of them.
3. Give them an example of how will conduct interview (see above)
4. Copy each attribute onto on response sheet
5. Ask participant about each attribute in turn
6. Go through each attribute, until participant feels there is nothing more to add.

Timings: 45 mins

Introduction	5 mins
Each attribute/ladder	7 mins
Closing	5 mins

End: At end sum up interview, reiterate availability of further information and summary.

Appendix G: *Empirical Project Qualitative Phase Interviews – Laddering Response*

Sheet

LADDERING RESPONSE SHEET

Participant number ....   Location/dept ....

ATTRIBUTE NAME ....
You said ....was a reason to apply to the RAF. Why is ....important to you?
Why is ....[19] important to you?
Why is .... important to you?
Why is .... important to you?
Why is .... important to you?
Why is .... important to you?

---

[19] Complete with previous response

Appendix H: *Empirical Project Qualitative Phase – Means-End Chain reliability*

information

Table H.1

Percentage of Agreement and Cohen's Kappa Statistic as Calculations of Inter-Rater Reliability

	Number of Coded Statements	Coders ratings	Percentage Agreement	Cohen's Kappa
First Round (96 codes)	746			
Difference		60		
Agreement		686	92.0%	.809***
Second Round (34 codes)	746			
Difference		15		
Agreement		731	98.0%	.950***

Note: *** p > 0.001

Appendix I: *Empirical Project Quantitative Phase Questionnaire – Participant*

Information Sheet

PROJECT DETAILS FOR APPLICANTS' PERCEPTIONS QUESTIONNAIRE

Introduction
My name is Nicola Elliott-Mabey and I would like to invite you to participate in this research project. **You should only participate if you want to**; choosing not to take part will not disadvantage you in any way and has **absolutely no effect in your selection** here today. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish (including parents/guardians). Please ask one of the recruiting staff if there is anything that it not clear, or if you would like more information. You can also contact me and my details are at the bottom of this information sheet.

The research
This research is being conducted to better appreciate the perceptions and opinions of people applying to join the RAF; for instance how did you first hear about the RAF, have you ever visited an RAF unit; and what do you think of the RAF? Future RAF youth and recruiting strategies require this type of evidence in order to understand how to appeal to and recruit young people. The RAF is also interested in what applicants seek from a job; for instance are you interested in pay and pension, and/or sporting opportunities? This latter information will be used in conjunction with other RAF surveys to help build a clearer picture of the future social needs of applicants and RAF personnel, and assist the RAF to include these important factors into their designs for accommodation, social facilities, infrastructure, career management and welfare.

The questionnaire
The questionnaire will take approximately 15 minutes to complete (although you do not have to complete it here if you wish to discuss it further with parents/guardians; or need assistance with completing it). There are completion instructions on the front page of the questionnaire. Once you have completed the questionnaire, please seal it in the envelope provided (addressed to Nicola Elliott-Mabey) and pass it back to a member of the recruiting staff. Alternatively you may place it in the civilian/Royal Mail.

You may withdraw from this research at any time without giving a reason.

Who will see my answers?
All questionnaires are anonymous and no information will be reported that will allow you to be identified, and you will not be followed up. You will notice that your questionnaire and return envelope include the location of your selection centre/office. You cannot be identified from this information. The location identifier is used to monitor returns and ensure all locations have participated. All information you provide will be treated in accordance with the Data Protection Act, 1998. The information from this research will be published or presented at meetings with the aim of benefiting others. You have the right to obtain all reports etc published or presented on request to the principal investigator. If you would like a summary of the research please contact me (details at the bottom of this information sheet).

Appendix G (Continued)

In the event of you suffering any adverse effects as a consequence of your participation in this study, you will be eligible to apply for compensation under the MOD's 'No Fault Compensation Scheme'.

Your paper questionnaire will be retained for 1 year before being destroyed. Data and computer files will be held for a minimum of 100 years in conditions appropriate for the storage of personal information.

A full scientific protocol for this research has been approved by the Ministry of Defence Research Ethics Committee.

Name and contact details of the Principal Investigator
Ms Nicola Elliott-Mabey, SO1 Psych 2, Senior Psychologist, Directorate of Personnel and Training Strategy, HQ Air Command.   I can be contacted by phone on: 0778 6027089.
If you prefer email please contact me on: Nicola.Elliott-Mabey419@mod.uk

Appendix J: *Empirical Project Quantitative Phase Questionnaire – Questionnaire trial construction of scales*

Table J.1

Principal Component Analysis Loadings (Varimax Method)[a] for 22 Instrumental Organisational image trial items

Component	1 Travel	2 Team	3 Basic needs	4 Development	5 Organisational objectives	6 Financial
The RAF offers the opportunity to travel around the UK	.671	.183	-.235	-.276	.234	.495
The RAF offers the opportunity to travel around the world	.851	.185	-.160	-.233	.205	.297
The RAF offers many career prospects	.453	-.183	-.554	.508	.013	-.204
The RAF offers lots of promotion prospects	.214	.187	.006	.720	.105	-.006
The RAF has a range of education opportunities	-.281	-.168	-.176	.771	.067	-.270
The RAF offers many training opportunities	-.219	.090	-.062	.729	-.235	-.256
The RAF offers the possibility to work in teams	-.122	.575	-.007	-.484	-.117	.510
The RAF emphasises teamwork	-.153	.590	-.079	-.341	.160	.576
The RAF offers a wide range of tasks	-.377	.781	.142	-.130	.256	.145
The RAF offers a wide range of jobs	-.462	.773	.144	-.152	.237	-.007
The RAF is clear about its objectives	-.395	-.018	-.344	.207	.653	-.084
I know how I would be able to contribute to the RAF's objectives	-.272	-.178	-.513	.053	.648	.019
The RAF has a clear organisational structure	-.355	-.109	-.164	.280	.658	.341
For me, the RAF would be a good place to work	-.175	.044	-.082	.240	.774	.099
The RAF will offer me short term job security	.323	.095	532	.257.	.477	.406
The RAF will offer me long term job security	.158	.452	.654	.160	-.300	.105
RAF bases are located in places I would like to live	.380	-.215	.657	-.132	-.167	-.097
RAF bases have good facilities and accommodation	.216	.419	.684	.195	-.143	-.038
The RAF has a good pay package	.333	-.326	.473	.254	-.115	.557
The RAF offers good allowance package	.451	-.306	.394	.190	-.266	.621
The RAF has a good pension package	.217	-.413	-.123	.217	-.099	.746
The RAF has a good death-in-service package	-.298	.295	-.007	.179	-.341	.669
Eigenvalues	3.065	2.989	2.886	2.794	2.783	2.668
Percentage of variance	13.93	13.59	13.12	12.70	12.65	12.12
Number of questionnaire items in each scale	2	4	4	4	4	4

Extraction Method: Principal Component Analysis

a. 6 components extracted.

Appendix J (Continued)

Table J.2

Reliability Analysis for Instrumental Organisational Image Scales

Scale	Item	Cronbach Alpha if item deleted
Travel (α = .956)	The RAF offers the opportunity to travel around the UK	n/a
	The RAF offers the opportunity to travel around the world	n/a
Team (α = .886)	The RAF offers the possibility to work in teams	.883
	The RAF emphasises teamwork	.844
	The RAF offers a wide range of tasks	.830
	The RAF offers a wide range of jobs	.836
Basic needs (α = .651)	The RAF will offer me short term job security	.726
	The RAF will offer me long term job security	.534
	RAF bases are located in places I would like to live	.621
	RAF bases have good facilities and accommodation	.433
Development (α = .773)	The RAF offers many career prospects	.730
	The RAF offers lots of promotion prospects	.753
	The RAF has a range of education opportunities	.667
	The RAF offers many training opportunities	.704
Organisational objectives (α = .857)	The RAF is clear about its objectives	.797
	I know how I would be able to contribute to the RAF's objectives	.809
	The RAF has a clear organisational structure	.800
	For me, the RAF would be a good place to work	.854
Financial (α = .789)	The RAF has a good pay package	.689
	The RAF offers good allowance package	.632
	The RAF has a good pension package	.702
	The RAF has a good death-in-service package	.867

Table J.3

Reliability analysis for Symbolic Organisational image scale

Scale	Item	Cronbach Alpha if item deleted
Symbolic image (α = .775)	The RAF is caring	.717
	The RAF is prestigious	.757
	The RAF is challenging	.734
	The RAF is sincere	.684
	The RAF is exciting	.756

Appendix J (Continued)

Table J.4

Principal Component Analysis Loadings (Varimax Method)[a] for 22 Job Characteristics trial items

	1 Job benefits	2 Values	3 Job attributes	4 Personal sacrifice
I looked for a job that provided me with health and dental benefits	.376	-.702	-.072	.226
I looked for job which offered long term job security	.450	-.377	.388.	.280
You should be rewarded for good performance by promotion	.799	.037	.317	-.099
I intend to change jobs a number of times in my career	586	-.289.	.141	-.289
It is important to me to have a job with a good pension plan	.433	-.665	.306	.215
It is important to me that the RAF will provide me with living accommodation	.656	.061	-.613	-.104
You should be rewarded for good performance by additional pay	.757	-.063	.304	-.046
An employer should look after its employees' families	.631	.402	.010	-.011
It is important that my individuality is respected	.328	.570	.073	-.445
It is important to be loyal to your employer	.348	.563	.148	-.229
It is important to respect your colleagues	.190	.815	.089	.020
It is important to respect the chain of command	.460	.573	.358	.303
I wanted a job where I could serve my country	.320	.470	.347	.398
It is important for me to have a clearly defined career path	-.239	.025	.551	-.570
I am constantly looking for opportunities to develop my own career	.031	-.255	.747	-.432
I wanted a job related to aviation	-.544	.252	.446	-.013
It is important to me to have a job which values my qualifications and experience	-.069	-.213	.658	-.130
I looked for a job with good sporting and fitness opportunities	-.090	-.045	.590	.298
Sometimes it is necessary to do things in your job that you would rather not	-.099	.356	.410	.431
Sometimes it is necessary to be apart from your family and friends because of your job	-.516	.122	.394	.478
Sometimes it is necessary to volunteer for additional duties	-.316	-.001	.211	.684
Sometimes it is necessary to work in a location you do not like	-.691	.001	-.029	.447
Eigenvalues	4.711	3.505	3.308	2.481
Percentage of variance	21.41	15.93	15.04	11.28
Number of questionnaire items in each scale	8	5	5	4

Extraction Method: Principal Component Analysis; a. 4 components extracted.

Appendix J (Continued)

Table J.5

Reliability analysis for Job Characteristics scales

Scale	Item	Cronbach Alpha if item deleted
Job benefits (α = .568)	I looked for a job that provided me with health and dental benefits	.496
	I looked for job which offered long term job security	.498
	You should be rewarded for good performance by promotion	.432
	I intend to change jobs a number of times in my career	.762
	It is important to me to have a job with a good pension plan	.481
	It is important to me that the RAF will provide me with living accommodation	.547
	You should be rewarded for good performance by additional pay	.455
	An employer should look after its employees' families	.482
Values (α = .788)	It is important that my individuality is respected	.781
	It is important to be loyal to your employer	.719
	It is important to respect your colleagues	.740
	It is important to respect the chain of command	.742
	I wanted a job where I could serve my country	.753
Job attributes (α = .651)	It is important for me to have a clearly defined career path	.638
	I am constantly looking for opportunities to develop my own career	.525
	I wanted a job related to aviation	.711
	It is important to me to have a job which values my qualifications and experience	.564
	I looked for a job with good sporting and fitness opportunities	.652
Personal sacrifice (α = .717)	Sometimes it is necessary to do things in your job that you would rather not	.697
	Sometimes it is necessary to be apart from your family and friends because of your job	.548
	Sometimes it is necessary to volunteer for additional duties	.657
	Sometimes it is necessary to work in a location you do not like	.687

Appendix K: *Empirical Project Quantitative Phase Questionnaire – Questionnaire*

items (Final version)

Cluster / scale	Associated items
Recruitment sources (5 point Likert scale: very useful to not at all useful).	Rate recruitment sources in terms of their usefulness in deciding whether to apply to join the RAF . TV/cinema advert . Radio advert . Recruitment brochure/leaflet . RAF Careers advisor . RAF Careers fair . RAF poster/banner . RAF Careers Website
Familiarity (5 point Likert scale: very familiar to not at all familiar).	How familiar were you with the RAF before you applied?
Prior exposure to RAF (2 point scale: yes/no).	Do you know anyone who works in the RAF? Have you ever visited an RAF base? Have you ever studied the RAF at school/college?
Intentions	If selected for the RAF, how likely is it you will join if you are successful in your first choice trade/branch? (5 point Likert scale: very likely to not at all likely). If selected for the RAF, how likely is it you are successful in another choice trade/branch? (5 point Likert scale: very likely to not at all likely).

Organisational image		
(5 point Likert scale: strongly agree to strongly disagree).	Financial issues	The RAF has a good pay package The RAF offers good allowance package The RAF has a good pension package The RAF has a good death-in-service package
	Basic needs	RAF bases are located in places I would like to live RAF bases have good facilities and accommodation The RAF will offer me short term job security The RAF will offer me long term job security
	Travel	The RAF offers the opportunity to travel around the UK The RAF offers the opportunity to travel around the world
	Development	The RAF offers many career prospects The RAF offers lots of promotion prospects The RAF has a range of education opportunities The RAF offers many training opportunities The RAF offers a wide range of jobs
	Team	The RAF offers the possibility to work in teams The RAF offers lots of sporting opportunities The RAF offers lots of adventurous training opportunities

Appendix K (Continued)

Cluster / scale	Associated items	
	Organisational objectives	The RAF is clear about its objectives I know how I would be able to contribute to the RAF's objectives The RAF has a clear organisational structure
	Symbolic attributes	The RAF is a caring organisation The RAF is a prestigious organisation The RAF is a challenging organisation The RAF is a sincere organisation The RAF is a professional organisation The RAF is an exciting organisation
Job characteristics		
(5 point Likert scale: strongly agree to strongly disagree).	Job attributes	It is important for me to have a clearly defined career path I am constantly looking for opportunities to develop my own career I wanted a job related to aviation It is important to me to have a job which values my qualifications and experience I looked for a job with good sporting and fitness opportunities
	Job benefits	I looked for a job that provided me with health and dental benefits I looked for job which offered long term job security You should be rewarded for good performance by promotion I intend to change jobs a number of times in my career It is important to me to have a job with a good pension plan It is important to me that the RAF will provide me with living accommodation You should be rewarded for good performance by additional pay An employer should look after its employees' families
	Values	It is important that my individuality is respected It is important to be loyal to your employer It is important to respect your colleagues It is important to respect the chain of command I wanted a job where I could serve my country
	Personal sacrifice	Sometimes it is necessary to do things in your job that you would rather not Sometimes it is necessary to be apart from your family and friends because of your job Sometimes it is necessary to volunteer for additional duties Sometimes it is necessary to work in a location you do not like Sometimes it is necessary to put yourself at personal risk to do your job