OPTOMETRY ADMISSION INTERVIEWS: A CASE STUDY OF PARTICIPANT EXPECTATIONS AND EXPERIENCES

by

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Abstract

The use of an admission interview by healthcare professional programs is widespread, yet the predictive ability of this selection tool has been found to be low due, in part, to the presence of numerous design flaws. This study of a Canadian optometry program at the University of Waterloo (UW) examined its admission interview from the perspective of its participants: the interviewers and the applicants. A survey was developed through a literature review, a series of research interviews, and a pilot test. The survey collected demographic information and participant perceptions relating to the purpose of and the candidate qualities assessed by: an ideal optometry admission committee, an ideal optometry interview, and the UW interview. Questions were also posed about the future of the UW interview. The questionnaire was sent in 1996 to all interviewed candidates (157) and all interviewers (23). The response rate was 71.7%. Principal component analysis was performed to reduce the data into thematic components. Independent and paired t-tests were used to compare the components. Applicants and interviewers shared a common vision of the ideal interview's purpose and content. The importance of this finding was discussed in terms of a symbolic interactionist approach. That is, through social interaction, these participants had attached a common meaning to admission interviews. Applicants and interviewers held significantly different views of the UW interview's purpose and content. Their experiences with the UW interview were also significantly different than their expectations of an ideal interview. Applicants judged their interview experience based largely on the interviewers' behavior while interviewers had the benefit of knowing more about the program's admission process. The greatest perceived difference between the UW interview and the ideal interview regarded clarifying candidate information. The inability of the UW interview to provide this function in the presence of a strong desire to do so was interpreted as a major determinant in creating a crisis of confidence in the UW interview. This descriptive study provides an approach for the program's administrators to re-evaluate the interview's purpose and content and offers an explanation for the interview's longevity.

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Dedication

To Leslie for helping me find my path and Carol for keeping me on it.

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INTRODUCTION

> *"[An interview is] a serious conversation directed to a definite purpose other than satisfaction in the conversation itself...not only spoken words, but other means of face-to-face communication also are used. Inflection, qualities of voice, facial expression, glint of the eye, postures, gestures, and general behavior supplement what is said. They all contribute to the purposeful exchange of meanings which is the interview."*
>
> ***Bingham and Moore (1941)***

Bingham and Moore (1941) touched on some of the key elements that comprise this complex, enigmatic process called the interview. The interview has long been studied and hotly been debated. Among healthcare professional programs, the use of the interview is widespread and often heavily weighted in the selection process. The paradox of the admission interview is that it remains embedded in the selection process of many healthcare professional programs despite its uncertain value. This 1996 study of a Canadian optometry program's admission interview begins to offer some understanding of this paradox by examining the interview's perceived purpose(s) and content from the perspectives of the interviewer and the applicant. These perceptions are compared with their views of an ideal admission interview and selection process as well as with the program's stated interview purposes and content.

Chapter 1 (Context) begins with a brief history of North American optometry with particular attention placed on optometry in Canada. It then reviews the qualities that demarcate optometry as one of the healthcare professions and outlines the current challenges facing this 20th century profession in Canada. Following this background information, the chapter provides a description of the research site: the University of Waterloo, School of Optometry. The program's admission process is described in detail, including the selection tool that is the focus of this study: the admission interview.

Chapter 2 (Review of Literature) opens with a discussion of the process of professional gatekeeping and the goals of an ideal selection process. This ideal vision is contrasted briefly with the typical healthcare professional program selection experience prior to providing an extensive review of the literature pertaining to selection interviews. The purposes of interviewing applicants are discussed along with the

possible sources of the interview's known limitations. Techniques for increasing interview reliability and validity are also considered. The final section of Chapter 2 is devoted to key concepts which have guided this study in Optometric Education.

In Chapter 3 (Methodology), the thesis research problem is articulated. This includes a delimiting of the study population and a description of the main research tool: a written questionnaire. A detailed description is provided of the process that led to the development of the mail-in survey, including: 1) reviewing relevant literature, 2) presenting a study proposal to the thesis committee, 3) developing a draft questionnaire, 4) seeking ethical approval for the study, 5) interviewing faculty and optometry students who had experience with the program's admission interview, 6) seeking feedback from the thesis supervisor, 7) piloting the questionnaire, and 8) seeking further feedback from the thesis committee. The final questionnaire mainly examined participant perceptions pertaining to the purposes of and the candidate traits sought by: 1) the UW optometry interview, 2) an ideal interview, and 3) an ideal admission committee. In addition to surveying participants of the UW optometry interview, the UW School of Optometry's written admission policies were examined.

Chapter 4 (Results) begins by statistically comparing the 1996 applicant pool with the four previous admission years to test whether the 1996 applicants were typical of recent UW applicants. Next, the optometry program's written information on the interview's purpose and content is described. This information enables the reader to become familiar with the institutional view of the program's interview and develop expectations with which to contrast the participants' perceptions. The survey data are analyzed and presented in two ways; initially in descriptive form and then in statistical form.

Chapter 5 (Discussion) interprets the main findings of this descriptive study. An analysis of the data revealed that, in terms of perceived purpose and content, UW applicants and interviewers held similar views of the ideal interview yet significantly disparate views of the UW interview. In addition, the study revealed significant differences between the participants' experiences with the UW interview and their expectations of an ideal interview. The chapter closes with several conclusions, future study opportunities and personal reflections on the study.

CHAPTER 1: CONTEXT

Overview of Chapter

This chapter opens with a brief history of North American optometry with a particular focus on Canada. It then examines optometry in terms of professional qualities such as training, service to society, intellectual effort, certification, organizational structure and autonomy. Like most professions, optometry is engaged in numerous debates that affect both who chooses to apply for entry into the profession and what training entrants receive. The current debates which include scope of practice, deinsurance of services and human resource planning are described. Following this background information, the chapter describes in increasing detail the site of the research: the University of Waterloo, Doctor of Optometry program. The particulars of the program's admission process are described. An admission interview is one of the selection tools employed by the program. It is the program's admission interview that is the focus of this study.

The Emergence of Optometry in Canada and the United States

The practise of optometry is a 20th-century profession which has emerged from the field of opticianry (Bailey, 1994; Classé, 1989; Fisher, 1995). During the 18th and 19th centuries, instrument makers who had acquired a specialized knowledge of optics were known as opticians. Although most opticians concentrated on the making and fitting of optical aids, some opticians also became interested in helping their clients determine the spectacles with the appropriate power. Towards this end, sight testing by some opticians started to occur by the 1850s. Few opticians could make a living solely by supplying spectacles and/or sight testing so many combined their work with other trades. Most often they were jeweler-opticians or druggist-opticians. By 1900, a clear division among opticians had developed. Those who examined eyes started calling themselves optometrists and those who strictly dispensed optical aids called themselves dispensing opticians. The first law defining the practise of optometry in the world was enacted during the year 1901 in the state of Minnesota. By 1908 in the United States, 13 states had passed optometry laws, 42 states had joined the American Association of Opticians, and the first Code of Ethics for optometrists was adopted (Bailey, 1994). In Canada, the first provincial act governing the practise of optometry was proclaimed in Quebec on March 9, 1909 (Fisher, 1995). One day later, a similar act was proclaimed in Manitoba. It was not until 1919 that an act governing the practise of

optometry in Ontario received royal assent. By 1925, all provinces in Canada and all states in the United States had adopted legislation governing the practise of optometry (Fisher, 1995).

During 1896, the Canadian Association of Opticians was formed. Two years later, the American Association of Opticians was created. It became the American Optical Association in 1910, which in turn became the American Optometric Association (AOA) in 1919 (Fisher, 1995). The AOA continues its work today. It took until 1941 before the present day Canadian Association of Optometrists (CAO) was formed. Several unsuccessful attempts beginning in 1895 predate the formation of the CAO. Canada's vast size and depressed economy may have contributed to slowing down the formation of the CAO (Fisher, 1995). Train travel over long distances took several days. Provincial delegates could not afford to be away from their struggling practices during the depression for up to two weeks to travel to and from organizational meetings (Fisher, 1995).

Today, there are approximately 3,000 practising optometrists in Canada. Approximately one-third of the optometrists are women (CAO, 1995a). The percentage of female practitioners varies considerably across the country with the lowest proportions (15 to 17%) occurring in the prairie provinces and Newfoundland, and the highest proportion existing in Quebec (45%). Thirty percent of optometrists in Ontario are women (CAO, 1995a).

The CAO, in conjunction with a consulting company, sent a survey to all optometrists practicing in Canada during 1994. The study was the most extensive investigation of practitioner practice patterns and perceptions of issues relevant to optometric practice since the 1950s. Results of the 1994 survey have appeared in a number of published papers (CAO, 1995a;b;c;d; 1996a). With a response rate of 50% and a response profile representative of the optometric population age and location, the results were interpreted as a valid reflection of the national membership. The CAO (1995a) report provided a profile of the "typical" Canadian optometric practice. On average, an optometrist spends about 35 hours per week examining patients and six hours per week engaging in practice management and administrative activities. The "typical" optometric practice handles 2,800 patient consultations, annually. Seventy-six percent of optometrists own or co-own their practice with sole ownership being the most common experience. The average number of optometrists per practice is 2.3. Most practitioners (88%) dispense

spectacles in their practice. The largest proportion of optometrists (40%) practise in a medium size city as defined by having a population of between 10,001 and 100,000.

Optometry As A Profession

The first three recognized professional groups in society were those who were devoted to the service of: the Church, the State, and the Law (Fisher, 1995). The existence of professions such as theology and law date back to Antiquity. In contrast, the emergence of the optometric profession in the 20th century is part of a growing trend toward professionalization in Western society. For example, between 1900 and 1970, the proportion of professionals constituting the work force in the United States increased from 4.5% to 14.5% (U.S. Bureau of the Census, 1975). Accurately determining the number of professionals in a work force depends on defining what constitutes a profession and there is limited consensus on this topic. Bayles (1981) suggested that three fundamental features common to professionals are that they require extensive training, use significant intellectual effort, and provide an important service in society. Common although not essential features of a profession include a process of certification, a formal organization of its members, and a level of individual and group autonomy. Using these criteria, optometry is a profession.

Training

There are two optometry programs in Canada and 16 in the United States. Most optometry programs are offered at a university, although five of the American programs are offered at private colleges of optometry. Admission and curricular approaches differ among the optometry programs; however, there are many fundamental similarities.

Three years of basic university sciences prior to four years of optometry training is the typical experience of North American optometry graduates today. In general, today's optometry students spend between 30 and 40 hours per week in lectures, labs, seminars, workshops and/or clinic. Clinical internships and externships predominate the later part of the programs. Graduates receive the Doctor of Optometry (OD) degree. All eighteen optometry programs seek to maintain accreditation from the Council on Optometric Education (COE) of the American Optometric Association.

Service To Society

The Greek roots of the word, optometry, are: *optikos* meaning "seeing", and *metron* meaning "to measure" (Fisher, 1995). Thus, optometry essentially means measurement of the eye. One of the early definitions of optometry appeared in the 1909 legislation governing the practise of optometry in Manitoba. In the act, one section reads, "The practise of optometry is hereby defined to be the employment of any means, other than drugs, medicine, or surgery, for the measurement of the powers of vision and the adaptation of lenses for the aid thereof." (Fisher, 1995). Contemporary definitions of optometry reflect an increased scope of practice that is moving towards medicine. The CAO uses the following definition in its current policy statements regarding optometry: "A Doctor of Optometry (optometrist) is an independent primary health care provider who specializes in the examination, diagnosis, treatment, management and prevention of diseases and disorders of the visual system, the eye and associated structures as well as the diagnosis of related systemic conditions." (CAO, 1996b). Management of conditions may involve prescribing optical aids such as spectacles, contact lenses, and low vision aids (e.g., magnifiers, telescopes, close-circuit TV monitors, etc.) or vision training programs in the case of certain eye-coordination and focusing disorders. The definition of primary eye care has undergone considerable debate in recent years. Initially, optometry was a drugless profession. Eventually, optometrists successfully lobbied for the right to use certain diagnostic pharmaceutical agents (DPAs) for the purposes of diagnosing ocular conditions and diseases. The list of allowed DPAs varies widely across states and provinces but in general optometrists licensed in the United States can use more DPAs than their counterparts in Canada. Most recently, the debate has centered around the use of therapeutic pharmaceutical agents (TPAs) by optometrists, an area of care formerly reserved for medicine. In the majority of American states, optometrists can now prescribe a limited number of TPAs for the treatment of certain eye diseases. This type of increased scope of practice has begun in Canada as three provincial governments (Alberta, New Brunswick, and Saskatchewan) have recently passed legislation allowing the future use of some TPAs by licensed optometrists.

Optometrists refer patients to physicians (usually ophthalmologists) for secondary healthcare involving surgery or drug therapy. Referral for tertiary care may involve other professionals such as counselors or occupational therapists who might help a patient deal with the impact of a permanent vision loss.

Intellectual Effort

Optometrists must understand several bodies of knowledge as they pertain to the eyes and the visual system. Their knowledge must span the domains of anatomy, optics, physiology, neurophysiology, pathology, pharmacology, epidemiology and psychology. They must know how to perform numerous diagnostic tests, design and implement appropriate management programs while employing effective communication skills. As the scope of optometry broadens and technology advances, the body of knowledge required of optometrists continues to grow. The expansion of optometry curricula from one year in the 1920s to four years by the 1950s provides an indication of the increased demand for knowledge and skills among optometrists.

Certification and Organizations

Optometrists may practise optometry after successfully completing the licensing examinations set for the area in which they wish to hold a license. A self-governing statute (e.g., Ontario's Optometry Act, 1991) is responsible for issues such as licensure, standards of practice and complaints. A self-regulating optometric body regulates the practise of optometry in each province or state (e.g., the College of Optometrists of Ontario). While optometric regulatory bodies exist to protect the public, optometric associations exist to represent the profession and its members. These associations exist at both the national and the provincial or state level (e.g., the Canadian Association of Optometrists and the Ontario Association of Optometrists). Most recently, Canadian optometric associations have been most active in representing the profession in areas of scope of practice, de-insurance and public education.

Autonomy

Numerous professions like optometry are self-regulated; however, the process of self-regulation has changed in recent years with calls for greater accountability to the public. This latter requirement is reflected in governmental legislation. The regulation of optometry varies across provincial, territorial and state lines; however, the description of optometry in Ontario provides an example of the level of professional autonomy.

In Ontario, optometry is one of 25 health professions regulated by the Regulated Health Professions Act (RHPA) which came into law in 1991 and was amended in 1993 (RHPA, 1994). Each of these health

professions has a profession-specific Act (e.g., Optometry Act, 1991) that serves as a companion piece to the RHPA. The policies of the RHPA are implemented by the college of each profession. For example, for optometry, it is the College of Optometrists of Ontario. The Ontario Minister of Health is responsible for the administration of the RHPA as well as a majority of the profession-specific Acts. The Health Professions Board (formerly the Health Disciplines Board) is charged with conducting registration hearings as well as registration and complaint reviews whereas the Health Professions Regulatory Advisory Council (an entirely new body under the RHPA) is responsible for facilitating ongoing policy development in relation to the health professions and monitoring the colleges' programs (e.g., quality assurance, patient relations, etc.). Both the Board and the Advisory Council operate independently of the Ministry of Health and the colleges (RHPA, 1994).

Prior to the RHPA, the thrust of health regulatory statutes in Ontario seemed to be limited to public protection from inadequate health care. Although this remains a goal of the RHPA, it also seeks to promote a competitive health services market (RHPA, 1994). Towards this end, the RHPA attempts to promote consumer freedom of choice, allow the evolution of roles played by various health professions, and encourage the creative utilization of individual health professions. The present statute also tries to provide a more efficient, egalitarian health care delivery system by regulating each profession according to the same rules. The developers of the RHPA have acknowledged that public protection and competition among health professions are somewhat contradictory goals (RHPA, 1994). For example, consumer freedom of choice is limited by regulating which profession may provide a particular service.

The RHPA specifies a number of professional committees that must exist as part of a framework for promoting accountability. In accordance with this statute, the Optometry Act, 1991 describes the membership, operation and duties of seven committees: the Executive Committee, the Registration Committee, the Complaints Committee, the Discipline Committee, the Fitness to Practise Committee, the Patient Relations Committee, and the Quality Assurance Committee (RHPA, 1994). The Optometry Act also defines the terms of registration, the behaviors that constitute professional misconduct, and the processes of member election.

Current Issues in Canadian Optometry

Current issues facing Canadian optometrists include scope of practice, deinsurance of services and human resource planning (CAO, 1995b;c;d; 1996a). Ninety-five percent of the 1994 CAO survey respondents favoured less restrictive legislation that would provide optometry's regulatory bodies with more autonomy and the profession with an avenue for increased scope of practice (CAO, 1995b). The right of optometrists to attain the restricted use of TPAs has been the primary focus of debates about optometrists' scope of practice in recent years. Ninety-two percent of optometrist respondents favoured the use of TPAs in the treatment of ocular disorders and diseases (CAO, 1995b). Three key reasons were identified for supporting the addition of TPAs to optometric practice: 1) enhanced accessibility and convenience for patients, 2) greater cost efficiency and lower healthcare costs, and 3) improved patient care (CAO, 1995b). The proportion of practitioners 55 years and older supporting the addition of TPAs was lower (82%) than for those under 55 years of age (94%). Within the optometric profession, resistance to acquiring TPA legislation took the form of a preference for traditional optometric roles, and concerns about insufficient training, increased liability and responsibility, increased risk of friction with ophthalmologists and family physicians, as well as insufficient remuneration to meet costs. As of 1994, no province had adopted TPA legislation for optometrists yet. Nonetheless, over 30% of respondents had obtained certification for TPA use (the proportion was over 50% in six of the provinces) after completing an average of 134 hours of training (CAO, 1995b).

Prince Edward Island is the only province of Canada in which optometric services have never been insured. As of February 1995, provincial health insurance plans had been revised such that optometric services were fully deinsured in both New Brunswick and Newfoundland and partially deinsured in the remaining provinces. Sixty-five percent of optometrists responding to the 1994 CAO survey supported full insurance coverage of optometric services, although the provincial break-down ranged from 13% to 75% (CAO, 1995c). The reasons for the significant disparity were not investigated to any degree. The most cited reason among optometrists for supporting full insurance coverage of optometric services has been the desire for universality in eye care (CAO, 1995c). The rationale for supporting partial deinsurance seems to be the desire to ensure adequate eye care for people who, because of age or circumstance, are most likely to experience vision problems, some of which may remain undetected (CAO, 1995c). Children, seniors and economically disadvantaged individuals are frequently cited groups who would be

most affected by a total loss of insured optometric services. Those supporting partial deinsurance also cited the perceived benefits of reducing government costs and increasing professional control of setting at least some of the fees. These last points, in addition to reducing government regulation and control, were the reasons cited by those supporting total deinsurance of optometric services (CAO, 1995c). A commonly held concern of optometrists is that if partial or total deinsurance of vision care is to exist, then it must be applied both to optometrists and ophthalmologists. Deinsurance may be having an impact on the number of patients seeking optometric services. Fifty-five percent of respondents estimated that their number of patient consultations had decreased by 18% on average subsequent to decreased healthcare insurance coverage (CAO, 1995c). Twenty-nine percent had found no change while 4% had noted an increase of, on average, 11% in consultation numbers (CAO, 1995c). The present Ontario government is considering deinsuring optometric services. Already, optometric insured services in Ontario are capped such that there is a claw back of income from private practitioners.

The 1994 CAO survey of human resource planning for optometry (CAO, 1995d) revealed two main concerns: 1) there is a trend towards an over-supply of optometrists, at least in some provinces, and 2) the distribution of optometrists in Canada is uneven. Several factors may account for these concerns. First, the supply of optometrists has been increasing faster than Canada's population over the past 20 years. Secondly, approximately 40% of the Canadian-trained optometrists graduate from the Université de Montréal (UM), École d'optometrie each year, yet only 5% of UM's graduates establish their practices outside of Quebec. Thirdly, an urban-rural rift across Canada exists, with optometrists perceiving urban centers as over-saturated and rural areas as under-serviced or appropriately-serviced by optometrists. A lack of portability of optometry licenses across provincial borders means optometrists when re-locating usually do so within rather than between provinces. If there was portability however, respondents indicated that British Columbia, Alberta and Ontario would be the provinces in which they would most likely choose to practise (CAO, 1995d). This type of trend would exaggerate the current uneven distribution of optometric care in Canada. The CAO survey (1995d) revealed that optometrists believed the future demand for their services would be enhanced by increases in the scope of practice and an aging population. Deinsurance and competition from refracting physicians would partially offset this demand. The concern from within the profession about over-saturating Canada with optometrists has no doubt

played a role in the drive for creating another School of Optometry in Canada over the past 50 years. Almost 60% of the respondents to the 1994 CAO survey were opposed to the idea (CAO, 1996a)

The lack of portability of optometry licenses across provincial borders is an interesting one that is likely a function of scope of practice issues, economic forces and historical differentiation. Most of the provincial differences in optometric scope of practice pertain to the use of pharmaceutical agents (either DPAs or TPAs). Changing scope of practice is not unique to optometry and the impacts of other service providers (e.g., physicians and opticians) who broaden their scope has economic and political repercussions on optometry. For example, in some provinces, opticians can fit contact lenses while in other provinces this is illegal. Provincial optometric bodies want to ensure that their practitioners are familiar with the boundaries of optometry and other vision care provider groups in their province. The overall economic state of a province affects people's tendency to seek health care, particularly in the presence of deinsured services. These factors, along with population distribution, numbers of existing practitioners and political relations with other healthcare providers undoubtedly affect the desire to increase the number of optometrists in a given province. In general, optometry programs design their curricula for the most liberal scope of practice relevant to their graduates. As a consequence, provincial licensing of optometrists likely has served more of a function of regulating the labour market than regulating differences in scope of practice.

Case Study Setting: University of Waterloo (UW), School of Optometry

The University of Waterloo (UW) and the Université de Montréal (UM) provide the only Doctor of Optometry programs in Canada. The language of instruction is English at UW and French at UM. The UW optometry program was established within the Faculty of Science in 1967 after almost nine years of sporadic negotiations (Fisher, 1995). The predecessors of the UW School of Optometry were located in Toronto. Between 1920 and 1925, the Central (formerly Toronto) Technical School on Harbord Street offered a one-year, 1,000-hour optometry course. By 1953, optometry training involved a four-year program offered at the College of Optometry on St. George Street in Toronto (Fisher, 1995). Current optometry training at UW involves a four-year, 6,500-hour curriculum. Completion of high school was a sufficient pre-requisite for optometric training during the 1950s in Ontario; today, the typical UW optometry entrant today has completed three years of university training in the Sciences.

The UW optometry program seeks its accreditation status from the Council on Optometric Education (COE). The most recent COE evaluation of the UW optometry program occurred in the fall of 1995. Appraisal of a written self-study plus an on-site visit by the COE evaluation team comprised the assessment. The COE accepted the evaluation team's assessment of the self-study and visit and granted the classification "Accredited". The next full evaluation COE visit for the UW program is scheduled for the fall of 2002; however, like all North American optometry programs, the COE can schedule a full evaluation sooner if it feels this is warranted. Such a requirement would be based on the COE's evaluation of a program's annual reports. In fact, the COE stated that an interim visit to the UW optometry program would occur in the fall of 1997 if it did not feel that the program's 1996 annual report demonstrated attempts to respond to the recommendations made by the COE during its 1995 appraisal. The major recommendations of the COE centered around financial issues. At the time of the 1995 site visit, there was considerable budgetary uncertainty in the postsecondary education sector as a result of significant provincial funding cuts. The COE eventually canceled the interim site visit after considering the 1996 annual report and a Spring 1997 visit by the UW School of Optometry Director and Administrator to the COE's head-office in St. Louis, Missouri.

When UW first began to offer an optometry program in 1967, physical space for optometry research, administration, and didactic teaching occurred in existing buildings on the UW campus while clinical instruction occurred off-campus. Since 1967, many changes have occurred in optometry at UW. By 1973, UW had built a separate building called the School of Optometry which housed all optometry activities. The faculty complement grew from 5 to 29, although, as of September 1996, a number of factors, including budget-driven early retirement plans, had reduced the number of faculty members to 23.

Annual student enrollment per class increased from less than 20 up to 60 where it has remained since 1970. Since 1967, the number of applicants competing for the 60 places in optometry has increased from less than 100 to almost 400, annually. The composition of the applicants and entrants has dramatically changed during this period. For example, the proportion of women admitted annually to the program has increased from approximately 3% to over 50% (Fisher, 1995). The minimum required academic background prior to entry into the UW optometry program has always been at least one year of university

sciences. Although in the 1960s and 1970s, many successful applicants had completed only the minimum academic requirements, the entering classes of the 1980s and 1990s have tended to possess a more extensive university background (see Appendix A for entry statistics between 1992 and 1996). In the most recent years, about 20% of the entering students have already completed one university degree. Over the years, applicants have been evaluated using a variety of academic and non-academic criteria. As competition to gain entry into the UW optometry program increased, an interview was added to the selection process in 1972.

Many curricular changes have also occurred since the program's inception. The largest scale curriculum changes occurred in 1980 and 1991 to accommodate the increased body of knowledge related to vision sciences and vision care and the changing scope of optometric practice.

The UW optometry program has always provided a conventional curriculum in which fundamental vision sciences are taught prior to the clinical sciences. Students spend the first two years of the four-year program in lectures and laboratories learning the fundamentals of the vision sciences and examination techniques. Their clinical internship begins in the third year, during which they spend one day each week providing supervised vision care. The remainder of their time is spent in lectures and laboratories further developing their fundamental understanding of the basic and clinical vision sciences and their applications to patient care. Unlike the first three years, which are eight-months in duration, the fourth year lasts 12 months. Either four or five days per week are spent in the provision of supervised vision services. During periods when students are only scheduled four days per week in clinic, students attend advanced skills seminars and workshops. The clinical training includes both an internship and an externship program. The seven-month internship program is based at the UW optometry clinic with some vision care day trips to hospitals, daycare facilities, and geriatric facilities. The externship program involves a four-month appointment in a United States setting that employs therapeutic pharmaceutical agents (TPAs) and a six-week appointment in a Canadian optometric private practice. The course descriptions published in the 1996-97 UW calendar are provided in Appendix B.

UW School of Optometry Admission Process

As a result of the UW offering the only English-instruction Canadian optometry program, applications are received from residents across Canada. Pre-professional course work can be completed at any Canadian university; therefore, residents outside of Ontario typically study in their home province. Six provincial governments have entered into tripartite financial agreements with the government of Ontario and the University of Waterloo. These contracts provide for the sharing of costs incurred in educating a limited number of optometry students from the six provinces. The maximum number of residents to which cost sharing applies has been set by each of the provincial governments: Alberta (7), British Columbia (5), Manitoba (3), New Brunswick (1), Prince Edward Island (1 every 3 years), and Saskatchewan (3). The School of Optometry Admission Committee is not provided with applicant residence information during the admission meetings because the Admission Committee is neither committed to nor limited by a contract province's allotted number of places to which cost sharing applies. For example, the Admission Committee could offer seven residents of British Columbia a place in the UW optometry program but the provincial cost sharing would apply to only five of those residents. If in another year, the Admission Committee offered two residents of British Columbia a place, the cost sharing would apply to the two residents. This approach is consistent with the Admission Committee's desire to make selection decisions based on perceived candidate skills rather than on demographic traits that do not reflect skills. The other provinces and territories have not entered into these financial agreements because of limited government funding for education and/or limited demands for optometrists. In the case of Quebec, the existence of the UM's optometry program provides the major reason for not participating in this type of agreement.

Admission Committee

Initially, the UW optometry Admission Committee included all optometry faculty members, the Assistant Registrar for Science, and the Admission and Undergraduate Affairs Assistant (this latter position was reclassified as the Administrative Assistant, responsible for admissions and undergraduate affairs). As the faculty complement grew, this translated into a committee of over 30 members. With some faculty unable or unwilling to participate and a growing sense of the difficulties in administering meetings of this type with so many participants, a restructuring of the Admission Committee was undertaken. Since 1991, 11 individuals have comprised the UW optometry Admission Committee: the Assistant Registrar for

Science, the two optometry admission officers, the Administrative Assistant, the Associate Director of the School, the Director of Clinics, the senior Undergraduate Affairs Officer, two optometry faculty members at large, one fourth-year optometry student, and one optometrist from private practice. The optometry student is chosen by the UW optometry student council executive. The private practitioner is chosen by the Ontario Association of Optometrists' Executive Committee. The UW optometry faculty elects the Committee's members at large. The other optometry faculty members on the Committee are there by virtue of their administrative assignment, which in most cases has been made by the Director of the School of Optometry. The Assistant Registrar for Science chairs the meeting, ensures that the Committee follows UW policies, votes only to break a tie and implements the decisions of the Committee. The Administrative Assistant acts in an administrative capacity and is the only member who does not hold a vote. All other members hold an equally weighted vote. The senior Admission Officer conducts the business of the meeting by presenting the candidates for admission consideration and facilitating discussions and voting.

Application Content

The UW application for admission to the School of Optometry contains six sections: A) Personal Identification, B) General Information, C) Academic Record, D) Autobiographic Sketch, E) three Confidential Assessment Forms (CAFs), and F) Essay. The Personal Identification section pertains to information such as the applicant's name, address, age, sex, social insurance number, etc.. The General Information section asks several questions, including when, if ever, the applicant has previously applied to the program, and whether her/his postsecondary record accurately reflect her/his academic ability. The Academic Record section requires that the candidate list what postsecondary programs and optometry pre-requisites have been started or completed. The Autobiographic Sketch section provides an area for the applicant to indicate his/her academic and non-academic awards and honours, work experience, special training, volunteer work and extracurricular activities. The CAFs are to be completed by non-relatives. Three different types of references are required: optometrist, academic and character. Referees must send their CAF directly to UW. Applicants complete Section F by writing an essay in which they define the term profession, differentiate optometrists, ophthalmologists and opticians, describe current issues affecting optometry in their home province or territory, and respond to several situations

with potential ethical dilemmas relevant to optometric practise or study. Applicants arrange for their postsecondary transcripts and Optometry Admission Test (OAT) scores to be sent to UW.

Approximately 60% of the candidates who complete their application to the UW optometry program are interviewed. The decision to interview is based upon consideration of academic performance in terms of overall mean (OM) and/or home province or territory of residence. The Admission Officers and the Administrative Assistant make this decision. They use the guidelines specified in Table 1.1 to determine whether an interview will be offered.

Table 1.1: Guidelines For Offering An Interview

Applicant Type		Indication To Interview
Internal Applicants:	Ontario Residents	If OM greater than threshold for year.*
	Contract Residents	If OM greater than threshold for year.*
	Non-Contract Residents	If OM greater than threshold for year.*
External Applicants:	Ontario Residents	If OM greater than threshold for year.*
	Contract Residents	If time permits.**
	Non-Contract Residents	If applicant offers to travel to UW.***

N.B.: Internal applicants = those who are or have enrolled in one or more UW courses.

External applicants = those who have never enrolled in a UW course.

*The OM threshold varies across years: usually it falls between 77 and 79%. These interviews are conducted on-site.

**Up to 14 contract candidates can be interviewed in a day (7 hours of interviews). The off-site contract interviews occur in six cities, one day per city: Vancouver, Edmonton, Calgary, Saskatoon or Regina, Winnipeg and Fredericton (PEI contract candidates travel to Fredericton). If there are more than 14 candidates to be interviewed in a day, then the 14 candidates with the highest OMs are interviewed.

***Non-contract candidates are rarely interviewed but they are not formally penalized for lacking an interview because it is a product of their residential status rather than their OM.

For all candidates who complete an application, the Administrative Assistant keypunches their admission data into a computer software program capable of performing various calculations and rankings. A computer generated spreadsheet with all the entered data is then proofread numerous times by the Administrative Assistant and the two Admission Officers to minimize the likelihood of any errors. The spreadsheet is used during admission selection meetings by the admission administrators (i.e., the Administrative Assistant, Assistant Registrar for Science, and the two Admission Officers). The remaining members of the Admission Committee use a truncated spreadsheet. The truncated spreadsheet

excludes demographic candidate data such as application number, sex, home province or territory because the Committee believes that this type of data does not describe skills relevant to becoming an optometrist. The truncated spreadsheet also excludes comments written in code by the Administrative Assistant and the Admission Officers. The code is used to minimize space usage on the spreadsheet. These data sheets are available to the Admission Committee only during the meetings when selection decisions are being made.

Application Timelines

The application period begins at the end of October each year. By the beginning of July, all admission decisions have been mailed by the UW Registrar Office personnel. Some of the timelines in between depend on whether an applicant is considered an internal or external applicant. This categorization has an administrative purpose only. The impact of the process results in a different paper trail and timeline for the two types of applicants. Applicants are considered internal candidates if they have at any time enrolled in a UW course. All other applicants are categorized as external candidates. Internal candidates pick up the optometry application from and return it completed to the Administrative Assistant responsible for admissions at the UW School of Optometry. In contrast, the UW Registrar's Office personnel send and receive the optometry applications for external applicants. This different process occurs because external applicants must first apply to the Ontario University Application Centre (OUAC) in Guelph, Ontario to declare on the necessary OUAC form (#105) that they wish to apply to the UW School of Optometry (and possibly to other Ontario programs as well). The OUAC sends the processed form to the UW Registrar's Office personnel, who then send the specific optometry application to the external applicant. The extra step in the application procedure translates into the external applicants having a few weeks longer to return their completed optometry application in March.

On-site interviews are provided to academically competitive applicants. Consequently, a review of applications that includes interim grade reports must precede the scheduling of interviews. The optometry Admission Office administrators can begin scheduling these interviews for internal candidates prior to external candidates because of the earlier arrival of internal applications. Off-site interviews occur towards the end of the on-site external interview period. External candidates residing in a contract province receive an off-site interview if time permits. Only when the number of applicants from a contract

province exceeds the interview time allotted (typically one day of 14 interviews), is the decision of who to interview based on the applicant's academic performance.

Admission decisions occur over two meetings; one in late May and the other, larger, one in late June. Only internal applicants, whose up-to-date transcripts have been received, are considered at the first meeting. UW transcript data can be digitally sent to the Admission Office, therefore, unless the internal candidate has also completed non-UW courses, all relevant data are available by the late May meeting. The earlier arrival of transcript data makes it possible to make earlier offers of admission to a limited number of internal applicants. These 'early' offers of admission are considered an advantage of being an internal applicant. The Admission Committee makes, at the most, 10 offers to exceptionally strong internal applicants and refuses ineligible internal applicants during the May meeting. The internal applicants, who have been offered or refused a place, are notified by the Registrar's Office in writing. Those applicants who have been offered a place must accept or decline their offer prior to the second meeting. This enables the Admission Committee to know how many places are left to fill in the class of sixty. All external applicants and all internal applicants, for whom no decision was made at the first meeting, are considered during the June meeting. Table 1.2 illustrates the application timelines for internal and external applicants.

Table 1.2: Application Timelines

Timing	Internal Applicants	External Applicants
Late October	UW optometry application available.	OUAC application available.
Late October	1st OAT sitting of academic year.	1st OAT sitting of academic year.
Early February	2nd OAT sitting of academic year.	2nd OAT sitting of academic year.
Late February		UW must have received OUAC form.
Early March	Application due (except CAFs).	
Late March		Application due (except CAFs).
Early April	On-site interviews.	
Late April	CAFs from referees due.	CAFs from referees due.
Late May		On-site interviews.
Late May	First admission meeting.	
Early June		Off-site interviews.
Mid June	Up-to-date university transcripts due.	Up-to-date university transcripts due.
Late June	Second admission meeting.	Second admission meeting.

Application Costs

Consistent with other professional programs, the cost of applying to optometry programs has significantly escalated through processing fees related to the program, standardized admission tests and transcript orders. Prior to 1997, first-time UW optometry internal applicants paid fees of a just over $100Cn during the application process while first-time external applicants incurred fees of almost $200Cn (as of 1997, significant university cut-backs led to the addition of a UW optometry application process fee of $75Cn).

All applicants face a $80US fee for sitting the OAT. Additional OAT fees are incurred for situations such as late registration ($15US), walk-in registration ($80US), and special or foreign test center registration ($90US). The UW School of Optometry requires that the applicant sit the OAT within eighteen months of applying to the optometry program. Therefore, repeat applicants might have to pay this fee in future application years. Applicants can choose to sit the OAT more frequently than the UW optometry application policy requires and thereby incur greater application costs.

Only external applicants pay a $75Cn fee to have the OUAC process form #105D, thus leading to the major cost difference between external and internal applicants. The OUAC imposes an additional $10Cn fee for applicants with a mailing address outside of Canada. The OUAC fee is incurred each year that an external candidate completes an application. Applicants must also pay a transcript ordering fee of $8Cn for each non-UW postsecondary institution they have attended. These transcript fees apply to all external applicants and a few internal applicants whose postsecondary studies have not been restricted to UW. These transcripts are required both by the March application deadline and then by the June deadline for those applicants who completed course work since March. Repeat applicants must order these transcripts with each application year.

The various aforementioned fees have included neither the possible travel and accommodation costs incurred by sitting the OAT or attending the interview nor the word and graphic processing costs incurred in the preparation of the application. As of 1997, candidates applying for admission consideration to the UW optometry program faced a new UW optometry application processing fee of $75Cn. This fee resulted from significant funding cuts to Ontario universities such as UW.

Selection Tools

The Admission Committee makes their selection decisions based on the evaluation of six selection tools: postsecondary transcripts, Optometry Admission Test (OAT) scores, interviews scores, references, autobiographic sketch profile and essay.

Postsecondary Transcripts

Transcripts completed at North American universities and colleges are evaluated in terms of programs of study, full versus part-time study, and grades. Applicants are strongly encouraged to pursue full-time studies in university science programs. Conferred degrees and their dates are noted. Several courses are identified as required or strongly recommended pre-requisites for admission consideration. The required pre-requisites are an eight-month, first-year course in each of physics, chemistry, biology, and calculus as well as a four-month, first-year course of psychology. Strongly recommended pre-requisite courses are four-month courses in organic chemistry, biochemistry, human anatomy, human histology, human embryology, microbiology, statistics, and physical optics.

Several calculations are made using the transcript grades: yearly mean, overall mean, median score and pre-requisite mean. The yearly mean (YM) is calculated from the courses taken in a particular year. The overall mean (OM) is derived from the undergraduate science YMs. The median score (MS) is the median of the undergraduate science YMs. The pre-requisite mean (PM) is the average of any required or recommended pre-requisite course taken by the applicant. Appendix C shows the formulas for calculating these measures of university performance. The Admission Committee makes its selection decisions using a spreadsheet that ranks the candidates using four academic measures. Candidates at the top of the spreadsheet have the highest academic performances because, in decreasing ranked order, the candidates are listed by their MS, OM, PM, and Optometry Admission Test (OAT) score. This means that candidates with the same MS are ranked by their OM. Further differentiation occurs with the PM. The OAT score is employed as the fourth and least important variable by which to rank the candidates. In addition to listing these academic performance measures on the admission spreadsheet, the YMs and the program in which the year was completed are also indicated. Examples of programs listed include: undergraduate science, engineering, arts, business, and graduate studies.

Optometry Admission Test

The OAT has existed for approximately 25 years. Initially it was called the Optometry College Admission Test (OCAT). The Association of Schools and Colleges of Optometry, in conjunction with a Chicago-based psychological testing program, conducts the OAT. The psychological testing program also administers the Dentistry Admission Test (DAT). There are nine OAT testing sites in Canada and over 100 in the United States. Candidates can sit the OAT an unlimited number of times. The OAT is offered in October and February of each academic year.

Four examinations comprise the OAT: 1) Natural Sciences, 2) Physics, 3) Reading Comprehension, and 4) Quantitative Reasoning. The Natural Sciences examination has three subsections: Biology, General Chemistry, and Organic Chemistry. Each examination involves multiple-choice questions (MCQs). It takes over five hours to sit the complete examination. Candidates are given 90 minutes to answer the 100 MCQs in the Natural Sciences examination. The Physics examination involves 40 MCQs over a 50 minute period. Fifty MCQs in 50 minutes comprise the Reading Comprehension examination while the same number of MCQs are presented in 45 minutes during the Quantitative Reasoning examination. Approximately midway through the test day, candidates get a 15-minute rest followed by a 25-minute pretest examination which is not scored.

OAT scores are based on the number of correct answers to the multiple choice questions in each section. Guessing is not penalized. The results are not reported in raw scores but rather in terms of standard scores that range from 200 to 400, in steps of 10. The relationship of scores to percentile performance is illustrated by a few examples of the equivalent percentile bands for OAT scores: 0.0 to 0.9 (200), 9 to 13 (250), 46 to 55 (300), 88 to 92 (350), and 99.3 to 100 (400). Eight OAT scores are generated in the final candidate report. There is a score for each of the three sections of the Natural Science examination, as well as for the three other examinations. A mean of the four science scores and a mean of all six test scores is also calculated.

The UW School of Optometry first began requiring applicants to sit the OAT in 1990. Applicants must sit the OAT within the preceding eighteen months of applying to the UW School of Optometry. Applicants for which no current OAT score has been received are considered ineligible for admission consideration. The

admission spreadsheet includes the candidates' most recent Total Science Score. The Admission Committee is notified of any sections or examinations for which a score below 300 was obtained and any past Total Science Scores, if applicable.

Interview

Interviewed candidates receive one 30-minute semi-structured, panel interview with two optometry faculty members. The interviewers are untrained. The only candidate information provided to interviewers is the person's name. The interview forms used by the interviewers have four sections, covering: 1) knowledge (i.e., practical or intellectual knowledge necessary to become an optometry student or optometrist), 2) problem-solving (i.e., the kind of thinking required to solve the problems which the optometry student or optometrist faces), 3) accountability (i.e., the responsibilities of an optometry student or optometrist), and 4) working conditions (i.e., physical effort, physical environment, sensory attention, and mental stress). Interviewers are asked to pose one or more suggested questions in each of the four sections. The interviewers are to make written notes on the interview form during the interview but they do not score each answer or section. A couple of minutes are usually left at the end of the interview to allow the applicant to pose one or two brief questions to the interviewers. Immediately following the interview, the interviewers independently indicate on the interview form, one of five possible overall scores: 1.0, 1.5, 2.0, 2.5 or 3.0. The assignment of scores to impressions of interview performance is that: 1.0 is strongest, 2.0 is average and 3.0 is weakest. The addition of brief explanatory comments for assigning the interview score are encouraged of all interviewers but required of those who have assigned a negative score of 2.5 or 3.0. The two interview scores are presented on the candidate spreadsheet. If the scores are different, the strongest score is presented first on the admission data spreadsheet.

Confidential Assessment Forms (CAFs)

Referees are asked to complete all three sections of the CAF. In Section A, the referee rates six qualities about the candidate using a scale ranging from excellent to poor or cannot judge: 1) initiative, 2) industry/drive, 3) integrity, 4) capacity for leadership and emotional maturity, 5) analytical skills, and 6) ability to communicate. In Section B, the referee answers three questions about whether the applicant is the type of person he/she would consult as an optometrist, as well as, how long, how well and in what

capacity she/he has known the applicant. Referees are asked to provide written statements in Section C that comment on traits such as motivation to enter optometry, compassion, moral and ethical development, emotional stability, physical and social presence, communication and leadership skills, as well as academic ability. Referees are also asked to identify any known weakness of the candidate.

The CAFs of all eligible candidates are read independently by both the Administrative Assistant and one of the Admission Officers. The number of CAFs received are noted on the candidates' spreadsheet. If applicable, the type (i.e., optometrist, academic or character) of missing or extra CAFs are indicated to the Admission Committee when the candidate is discussed. Candidates choose their referees. Consequently, most CAFs are quite positive. If, however, a CAF is judged by both the Administrative Assistant and the Admission Officer to be weak or outstandingly strong, then that impression is shared with the Admission Committee. In such cases, a member of the Admission Committee usually requests that the CAF be read aloud. In fact, committee members can request the CAF of any candidate to be read. When such requests occur, the senior Admission Officer will modify the reading of Section C to remove any references to candidate name or sex.

Autobiographic Sketch Profile

Prior to the admission meetings, the Administrative Assistant and one of the Admission Officers independently read the autobiographic sketches of all candidates. A score of 1, 2, or 3 is assigned to each of four categories: awards (AW), special training (ST), volunteer work (VW), and extracurricular activities (EA). A score of 1 is strong, 2 is average, and 3 is weak. These four scores are listed in sequence to form the autobiographic sketch profile. If the two raters disagree about a candidate's profile, they discuss their opinions in an effort to achieve consensus. If this fails, the other Admission Officer will join the discussion until consensus is achieved.

Essay

The essays of all eligible candidates are read both by the Administrative Assistant and one of the Admission Officers. They evaluate the essay both in terms of content and grammar. No grade is assigned; however, an essay deemed to be outstandingly strong or inadequate is reported to the

Admission Committee during the admission meeting at the time the particular candidate is being discussed.

Admission Meeting Process

Admission meetings are held in camera. Each year, the Admission Committee identifies 60 candidates for offers of admission. All other candidates receive a refusal. Ten of the refused candidates are selected by the Admission Committee in the second meeting for waiting list status (called the contingency list). Those candidates identified for the contingency list are ranked after the admission meetings by the Administrative Assistant and the Admission Officers. They instruct the Assistant Registrar for Science to implement all admission decisions by letter. When a candidate declines an offer of admission to the optometry program, the Assistant Registrar for Science is instructed to offer a place in the optometry program to the candidate ranked at the top of the contingency list. Movement down the contingency list occurs, if and when further offers are declined. Appendix D shows the number of offers, refusals, accepts, and declines between the years 1992 and 1996.

The Assistant Registrar for Science chairs the School of Optometry admission meetings. After reviewing the agenda and reminding the Committee members of the in camera nature of the meeting, the business of the meeting is turned over to the senior Admission Officer The Administrative Assistant, the junior Admission Officer and the Assistant Registrar for Science assist the senior Admission Officer as needed (e.g., obtaining additional information from a candidate's application for discussion purposes or highlighting policies). The senior Admission Officer begins by reviewing the nature of each column on the spreadsheet for the particular benefit of new Committee members. This review is reinforced by a separate sheet of definitions received by each Committee member. Each row of the spreadsheet represents a given candidate.

Having oriented the members to the candidate spreadsheet, the senior Admission Officer presents the first candidate. The first candidate presented is the individual listed at the top of the spreadsheet (only internal candidates comprise the May meeting spreadsheet while all candidates comprise the June meeting spreadsheet). In general, the senior Admission Officer presents the candidates in the order they appear on the spreadsheet. The senior Admission Officer deviates from this approach towards the end of

the second meeting when there are only a few places left in the entering class (e.g., less than 10) and there are still numerous competitive candidates to consider. At this point, the senior Admission Officer invites all members of the Committee to review the spreadsheet and identify a number of candidates for whom they wish to advocate in the ensuing discussions. During the May admission meeting, when a limited number of internal candidates are being considered, the Committee faces the decision options of: offer, refuse or defer to the next meeting. During the second meeting, the decision options are offer, refuse, contingency status.

Presenting a candidate involves the senior Admission Officer highlighting the candidate's academic and non-academic data which are visible to all members on their spreadsheets. The senior Admission Officer adds to this information comments from a coded comment column not visible to most members. At the end of the presentation, the Officer may suggest an admission decision (this is more likely when the decision appears obvious) or s/he may suggest a discussion ensue. In either case, Committee members are welcomed to discuss the merits of the candidate's application. An example of a presentation might sound like, "As you can see, Candidate 'X' (family name given) has completed one year of engineering and two years of science during which time the candidate has completed all the required prerequisite courses and half of the recommended prerequisite courses. Candidate 'X' has shown a strong university academic performance and a strong OAT score with the exception of a weak Reading Comprehension Score of 240. You will note that the non-academic portion of Candidate 'X' is mixed, with two weak interview scores and an average autobiographic profile." The information presented to date is a review of the visible data string for this candidate. The senior Admission Officer will then add further data from the coded comments. "This is Candidate 'X's' second application to our program. All the postsecondary work was completed at University 'Y' and, according to the candidate, the program switch from engineering to science occurred as the candidate's interest in optometry developed. The interviewers assigned weak interview scores because they questioned the candidate's commitment to optometry and knowledge of the profession. These comments were similar to last year's interview. In contrast, the references were all strong and praised the candidate's initiative to pursue optometry. The application differs from last year in the strength of the OM and MS, however the candidate has not obtained any more of the recommended prerequisites this year's application than for last year's application". The senior Admission Officer would invite discussion of the candidate at this point.

In the case of very strong candidates, decisions are often made in less than a minute with little or no discussion. When discussions ensue over a candidate, the debate can last anywhere from a couple of minutes to a quarter of an hour. In general, the longest discussions occur in the June meeting as the number of remaining offers declines. Discussions most often relate to differing views of the importance of admission data, requests for further information or clarification of Admission or University policies. For example, the Committee members might debate the importance of the interview (e.g., "I don't believe the negative interview score means anything." Or "If we interview, we should count the scores."). Sometimes members wish to clarify or gain information (e.g., "Did the candidate explain why the second year average was so much lower than the other three years?" Or "Would you read the optometrist reference?"). In general, the greatest debates seem to relate to prerequisite course completion and interview performance. The May meeting typically lasts about sixty to ninety minutes. The June meeting often lasts 4.5 to 5 hours.

Investigator's Involvement In The UW Optometry Admission Process

My interest in professional gatekeeping, and in particular the selection interview, initially developed out of my experience as a UW optometry applicant and later out of one of my service commitments as a faculty member at the UW School of Optometry. I successfully applied to the UW School of Optometry in 1978. At that time, the application process involved consideration of my university transcript, three references, a brief personal questionnaire, an essay and a 30-minute, panel interview. Twenty years later, the only strong memories I have of the admission process derive from the interview. Of possible interest, the aspects of the interview I still recall are questions posed by one of the two interviewers that I experienced as sexist.

As a faculty member, I served as an Admission Officer for the UW optometry program between 1986 and 1997. Initially, I was the sole Admission Officer. After the formation of the 11-member Admission Committee in 1991, I served as the Senior Admission Officer. I was quite involved in affecting several policy admission changes during this 12-year period; including, increasing the standardization of the interview format and references, developing an autobiographic sketch, broadening the representation on the Admission Committee, removing applicant names from the information provided to the Admission

Committee, and increasing the pre-requisite background to include Sociology, English, and Philosophy as well as more Sciences (the latter change will come into effect in 1999).

Over the years, I found the UW interview was an aspect of the admission process that generated tremendous discussion and debate. Comments, both solicited and unsolicited, frequently came from optometry faculty, applicants and students. These comments related to both their expectations of interviews and their experiences with the UW interview. The debate surrounding the UW interview led me to wonder what interviewers and applicants believed about the UW interview and how these perceptions might differ from their expectations of an ideal interview.

Prior to pursuing my PhD in Education, my formal training was in Science. I am a Doctor of Optometry with a Master of Science in Physiological Optics. I have little formal training in Psychology and no formal training in Sociology.

Summary of Chapter

Optometry is a 20th-century health care profession which is currently facing debates about its scope of practice, deinsurance and labour market control. The University of Waterloo offers one of only two optometry training programs in Canada and it is responsible for graduating approximately 60% of Canadian trained optometrists. The curriculum and applicant pool has undergone significant changes in the past 30 years. Competition to gain entry into UW has increased dramatically since the program's inception in 1967. The use of an interview as a selection tool has existed for 25 years yet its use and meaning has long been a contentious issue. With about 150 hours of faculty time being spent interviewing and approximately 75 hours of staff and faculty time being spent in the interview's administration, interpretation and explanation each year, it is an issue that bears investigation. My experience as an optometry applicant and my work as an Admission Officer in an optometry program led to my interest in professional gatekeeping.

CHAPTER 2: REVIEW OF LITERATURE

Overview of Chapter

This chapter begins with a description of the process of professional gatekeeping and the goals of an ideal selection process. Typical healthcare professional program selection tools are briefly considered prior to an extensive review of the literature pertaining to selection interviews. The purposes of interviewing applicants are discussed along with the possible sources of the interview's known limitations. Techniques for increasing interview reliability and validity are also presented. The final section of the chapter is devoted to establishing the key concepts which have guided this thesis.

Professional Gatekeeping

Professional gatekeeping is the process by which an admission committee and/or licensing body determines which individuals meet predetermined criteria for entry into the profession. McGaghie (1987) argues: "The decision to admit individuals to medical school is, with few exceptions, tantamount to a decision to grant them a license." Attrition data support this claim. According to Johnson (1983), about 50% of all applicants are admitted to medical schools. Of those admitted, about 95% obtain an MD degree. Almost 100% of those with an MD degree obtain a license to practise. The high likelihood that most admitted students will obtain their license to practise suggests that, right or wrong, the admission committee is the primary gatekeeper to that profession. This puts a significant amount of pressure on admission committees to select those who will uphold the goals and ideals of their profession.

Powis (1994) describes the ideal selection policy. The admission committee develops and implements an efficient and effective policy which selects applicants who will be compatible with and successful in both the program and practice. Towards this end, the selection policy specifies the candidate qualities which are associated with this kind of compatibility and success. These qualities include cognitive, non-cognitive and demographic aspects. The selection policy includes a list of valid, reliable and acceptable tools with which to select these identified qualities. In reality, such a policy seldom exists because either the desirable qualities have not been explicitly identified or the appropriate tools to select identified qualities have not been employed for reasons of fiscal and human resource costs. Even if an admission committee attempts to identify both the desired qualities and the relevant selection tools, they may have to modify the

policy due to external pressures from the program, university, community and/or political bodies (Powis, 1994).

Powis (1994) describes three separate processes that typically guide a healthcare program's selection decisions. First, the admission committee seeks to reduce the number of applications it must consider because usually the program is notably oversubscribed. Normally, this is done by eliminating applicants whose performance falls below some academic level. Second, regardless of whether the program is under- or oversubscribed, an admission barrier is implemented to eliminate some applicants deemed to be unsuitable for training. Finally, after having reduced numbers and excluded unsuitable candidates, a positive selection process is implemented to identify candidates with agreed upon desirable qualities. When choosing a series of measures to be taken of candidates, it should be clear to the users which ones are being used to reject unsuitable candidates and which ones are being used to select suitable candidates.

Ideally, the selection policy should clearly articulate whether its goal is to select good students or good practitioners. As the goal of the program is presumably for professional students to continue on in practice, the basic qualities that describe a good practitioner should first be identified. This in itself is no easy task and may depend on whose opinion is sought (Powis, 1994). If, however, desirable practitioner qualities are identified, then close attention can be paid to curriculum design in order to instill or nurture these positive qualities (and possibly discourage negative qualities). The development of an ideal selection process cannot occur in a vacuum. It should occur after consultation with others concerned with the identification and development of core competencies and qualities. Having designed the curriculum with this in mind, the selection policy can then be developed that will select candidates who will be successful in this type of program. Selecting good students rather than good clinicians may be more pragmatic because: 1) "good" students will more likely fit into the program's curriculum, style and ideology, and 2) "good" students will be less likely to withdraw or fail. Clearly, program administrators are highly motivated to avoid the significant cost of attrition, particularly when it occurs in the latter part of the program. If a group of desirable qualities has been identified, the admission committee should consider whether progress through the program will likely instill or eliminate some of these qualities. If this is the case, some would argue there is no point in selecting for such qualities (e.g., Powis, 1994). Alternatively,

it may seem a more positive approach to select those who already possess the desired qualities and to design the curriculum to nurture these qualities.

Ideally, the selection tools chosen should be both reliable measures and valid predictors of performance. The theoretical consequence of using selection tools with low reliability and validity is that the pool of entrants may be inferior relative to the original applicant pool. Even if the selection tool is reliable and valid, the selection process is still ineffective if the selection tools are misused. For instance, while there may be widespread agreement that a degree of academic ability is necessary for the successful study and practise of a profession, the admission committee must be clear whether it is using an academic measure with the assumption that there is a threshold of necessary academic skill or a linear correlation between academic performance and successful practise. In addition, the admission committee needs to consider whether it will elicit information from a candidate directly (e.g., evaluating performance of a task) or indirectly (e.g., inferring a quality from an autobiographic sketch). Generally, direct measures are the preferred strategy.

Selection decisions occur long before the admission committee ever makes its decisions because of the existence of self-selection. Candidates choose whether and where to apply. If success in the program depended primarily on academic ability, attrition would be virtually non-existent in programs like medicine, dentistry and optometry because entrants have already demonstrated high academic success. Instead, student alienation and disaffection is a prominent cause of failure in or withdrawal from professional programs (Powis, 1994), consequently it behooves the admission committee to publicize its program's goals and style. This way, informed potential candidates may self-select depending on their congruence with the institutional goals.

In summary, an ideal selection policy would evolve from initially determining the qualities to select for or select out. Next, measures of these qualities that are believed to be reliable and valid would be identified, piloted and then compared with predetermined outcome measures. Only after the test measures have been shown to correlate with these outcome measures would the test measure be used as a selection or rejection tool. Unfortunately this final step is rarely performed because it is considered to be impractical. Without this final step however, the true ability of the test can not be established because those who

perform badly with the test are not admitted thereby eliminating the possibility of evaluating their performance in the program.

Admission Variables

While some educational institutions maintain an open admission policy (i.e., all applicants are admitted), most select candidates for admission. Healthcare professional program admission committees usually consider a complex combination of cognitive and non-cognitive data in their selection decisions (Johnson & Edwards, 1991; Levine, Knecht & Eisen, 1986; Myslinski & Jeffrey, 1985; Spafford, 1995). This involved process is not surprising when one considers the intricate nature of qualities associated with successful practitioners. One might assume that all oversubscribed professional programs would necessitate the use of a complex selection process; however, non-healthcare professional programs seem to employ a selection process based primarily or entirely on academic transcripts. For example, at the University of Waterloo, the applicant-to-place ratios for Accounting (Arts) and Optometry are both about 6:1, yet the UW Accounting Admission Committee considers strictly the high school transcripts while the UW Optometry Admission Committee considers university transcripts, standardized admission test scores, references, interviews, autobiographic sketches and essays (Ontario Universities' Application Centre, 1997).

Cognitive skills can be subdivided into four subsets: knowledge base, intellectual ability, numeracy and verbal/literacy skills (Powis, 1994). Commonly used cognitive-based variables include consideration of a part or all of the university (and/or high school) transcripts as well as standardized admission test scores. The latter are profession specific. For example, optometry applicants sit the Optometry Admission Test (OAT), dentistry applicants sit the Dental Admission Test (DAT), and medical applicants sit the Medical Colleges Admission Test (MCAT). The predominant use of academic achievement means that, right or wrong, knowledge base is the main cognitive skill evaluated during the selection process. Non-cognitive data can be subdivided into demographic information (e.g., age, race, sex, sexual orientation, socioeconomic status, etc.) and personal qualities (e.g., interests, motivation, personality, goals, communication skills, etc.). While it is true that the characteristics of the professional body are affected by the use of demographic data in the selection process, their inclusion tends to be of a discriminatory nature (Powis, 1994). The personal qualities of the candidate are the potentially more relevant non-cognitive

data in the selection process. Typically, non-cognitive based admission variables used by healthcare programs include interviews, references, autobiographic sketches, essays and written psychological test scores.

Interview Purpose(s)

Interviews are conducted for the purposes of: 1) gathering information, 2) verifying information, 3) making decisions, 4) predicting performance, 5) recruiting participants, and/or 6) improving public relations (Edwards, Johnson & Molidor, 1990; Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985; Spafford, 1995). The admission interview has been a widely used selection tool in North American healthcare professional programs (Johnson & Edwards, 1991; Medical School Admission Requirements, 1980; Myslinski & Jeffrey, 1985; Puryear & Lewis, 1981; Spafford, 1995; Willer, Keill & Isada, 1984). Nonetheless, its ability to fulfill some of the other goals such as improving public relations or predicting performance has not been established.

Gathering Information, Clarifying Information and Making Decisions

In 1980, the Association of American Medical Colleges (AAMC) reported that 99% of American medical schools used interviews in the selection of students (AAMC, 1980). Surveys have been conducted about the admission interviewing practices of medical schools in the United States alone (Johnson & Edwards, 1991; Puryear & Lewis, 1981) and the United States, Canada and Puerto Rico (Willer, Keill & Isada, 1984). At least 96% of the respondents in each survey indicated that an interview was part of their selection process. Response rates to these surveys ranged from 72% to 94%. As with medical schools, the admission interview has been used widely by dental and optometry programs. Myslinski and Jeffrey (1985) received responses from approximately 70% of 59 American dental schools. They found that 93% of the respondents incorporated an interview into the admission process. Spafford (1995) obtained an 83% response rate to a survey of the admission practices of the 18 optometry programs in Canada and the United States. Eighty percent of the respondents indicated an interview was part of their optometry program's admission process.

Not only is the admission interview a common component of healthcare student selection, it is an influential one. Evidence for this statement comes from studies that have determined the relative

importance of various admission variables in selection decisions (Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985; Puryear & Lewis, 1981; Spafford, 1995). Johnson and Edwards (1991) found that medical admission committees tended to rely more on the interview than any other admission variable when making selection decisions. In decreasing relative importance, medical admission committees also used the undergraduate science grade-point average (GPA), letters of references, and the medical standardized admission test (MCAT). In an earlier study of medical admission practices, Puryear & Lewis (1981) found the interview was the second most important admission variable used in decision making. The higher ranked importance of the interview in the more recent study by Johnson & Edwards (1991) may be simply a function of differences in survey question wording between the two studies or it may be a reflection of a change in perception of the interview's role. Optometry admission committees have tended to place less relative importance on the interview data. Spafford (1995) found the undergraduate GPA, was ranked most important, followed by the optometry standardized admission test (OAT), the interview, and then, the references. Dental admission committees have weighted the relative importance of the interview in admission decisions as first or, more often, above average (Myslinski & Jeffrey, 1985).

It is difficult to quantify the weight of the interview beyond a relative importance in admission decisions because few admission committees assign a fixed weight to each variable. Thus the impact of the interview usually varies across candidates. The weight of the interview could depend on any number of factors. For example, Clayton, Baird, and Levinson, (1984) studied a medical school in which applicants were ranked using a combination of an interview score and an academic score (derived from the GPA and MCAT score). The weighting of these two scores was not fixed. They found that, statistically, the interview scores of female applicants carried more weight than their male counterparts in determining the applicants' ranking. Although the difference on its own was small, the potential for gender discrimination was suggested by the additional finding that the interview scores of female applicants were significantly lower, in statistical terms, than those of male applicants.

At most, 25% of admission committees, responding to surveys about their admission practices, have indicated the weighting of variables is fixed across candidates (Johnson & Edwards, 1991; Spafford, 1995). On average, the fixed weight of an interview ranges from 31 to 35% (Johnson & Edwards, 1991; Puryear & Lewis, 1981; Spafford, 1995).

Another method of trying to quantify the use of interview data in admission decisions has involved studying the impact on class membership of including versus excluding the interview performance. Doering, Killip, and Fuller (1979) conducted a retrospective study of a dentistry program. A dentistry class was selected by considering the candidates' interview scores, cumulative GPAs, Dentistry Admission Test (DAT) scores and the number of years of pre-professional education. The membership of the actual selected class was compared with that of a hypothetical class that was later selected by considering all the data with the exception of the interview scores. The two class memberships differed by 20%. Unfortunately, the investigators indicated neither whether the variables were assigned a fixed weighting nor whether the same people selected both the classes. Without this information, it is difficult to ascertain whether the apparent difference in class membership was a function of the interview alone. Spafford (1994a) conducted a retrospective study of an optometry program's admission decisions. The actual class of 60 optometry students was selected by the program's admission committee in 1991 using a combination of academic and non-academic data derived from university transcripts, OAT scores, interviews, references, autobiographic sketches and essays. No fixed weighting was assigned to the admission variables; however, it was acknowledged that university performance was viewed as important. Several measures of university performance were calculated. Yearly averages were calculated from the courses taken in a given year. The median score and overall average were derived from the yearly averages in a science program. The pre-requisite average was derived from completed courses that the optometry program had identified as required or recommended background. The actual class membership was compared with five hypothetical class memberships, drawn from the same applicant pool of eligible candidates. Members of a hypothetical class were selected by the investigator on the sole basis of one particular admission variable. That is, only the top 60 performers for a given admission variable were chosen for that class. The five hypothetical classes were the: (1) Median Score (MS) class, (2) Overall Average (OA) class, (3) Prerequisite Average (PA) class, (4) OAT class, and (5) Interview Score (IS) class. Agreement with the actual class membership was greatest for the MS (90%), OA (90%) and PA (86.7%) hypothetical classes. There was lower agreement of the actual class with the OAT (63.3%) and IS (58.3%) hypothetical classes. The differences in class memberships were attributed to the level of confidence that admission committee members had in each of the admission variables. The committee's confidence was much higher in university academic measures than it was in the OAT or interview scores. In fact, the

admission committee's belief in the importance of academic performance led to the way the candidate data were presented to the committee. The admission committee studied the eligible candidates' data on a spreadsheet that ranked the applicants by four university performance measures. In decreasing ranked order, the candidates were listed by their university median score, then by their overall average, prerequisite average and lastly, by their overall OAT score. The lower agreement of the actual class with the OAT class was attributed to the admission committee's limited experience (i.e., only 2 years) using this admission variable. Concerns about low interview reliability and validity may have accounted, in part, for the lower agreement of the actual class with the interview (IS) hypothetical class.

The interview's widespread use and great importance among North American healthcare professional admission committees is not typical of other postsecondary undergraduate admission committees. For example, out of 155 undergraduate programs offered at the University of Waterloo, the only admission committees that incorporate an interview into their selection process are the School of Optometry and the School of Architecture. Admission strategies may differ depending upon any number of factors, including (1) the number and availability of applicants and interviewers, (2) the goals of both the program's selection tool(s) and the curriculum, (3) the reliability and validity of the selection tool(s), and (4) the ethos of the program. A great importance has been placed by healthcare professional admission committees on assessing the humanistic skills of their applicants (Johnson & Edwards, 1991; McGaghie, 1990; Myslinski & Jeffrey, 1985; Spafford, 1995). In medicine, Spooner (1990) states that admission committees are stricter than licensing boards when it comes to judging non-cognitive skills related to social and ethical transgressions. The interview has been the most frequently used selection tool for trying to evaluate these non-cognitive skills. The extensive use and intent of selection interviews by healthcare programs is similar only to that of business organizations. Ulrich and Trumbo (1965) surveyed 852 organizations and found that 99% of them included an employment interview in their selection process. The use of the employment selection interview is second only to resumé and application review (Ash, 1981; McDaniel, Schmidt, & Hunter, 1988).

Johnson & Edwards (1991) reported that the admission interview at every American medical school responding to their survey shared a common purpose; the interview was conducted to assess the candidate's noncognitive or humanistic skills. Spafford (1995) found that evaluating the humanistic skills

of applicants was also a frequent purpose (83%) of optometry interviews. However, interviewing to evaluate cognitive skills was surprisingly frequent among medical schools (26%) and optometry schools (33%) in view of the number of other established selection tools used to evaluate these skills such as transcripts and standardized admission test scores (Johnson & Edwards, 1991; Spafford, 1995). Other less common selection-oriented purposes for interviewing medical and optometry school applicants involved: clarifying written application information, checking for potential psychological problems and evaluating the applicant's fit with the school's mission (Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985; Spafford, 1995). The advantages of using the interview to clarify other aspects of the application may be outweighed by the tendency of interviewers to score the interview based more on data found in the written application than on the interview itself (Dipboye, Fontenelle, & Garner, 1984; Elam & Andrykowski, 1991; Litton-Hawes, MacLean, & Hines, 1976; Spafford, 1994b; Tarico, Altmaier, Smith, Franken, & Berbaum, 1986). Despite a belief that the interview was the best selection tool for identifying psychiatrically at-risk students, Willer, Keill & Isada (1984) found that there was widespread concern among medical school administrators that both the structure of the admission interviews employed and the level of interviewer training provided were insufficient to identify such individuals.

Public Relations and Recruiting

Eighty percent of medical school respondents and 42% of optometry school respondents indicated that the interview's purpose was also to sell students on attending their particular medical school (Johnson & Edwards, 1991; Spafford, 1995). Employing the interview as a public relations tool occurs among dental programs as well (Myslinski & Jeffrey, 1985). In these cases, a goal of the interview is to market the school by emphasizing the school's academic strengths and facilities as well as the community's cultural attractions. An opportunity to 'show off' the school is afforded because most interviews are conducted on-site (Johnson & Edwards, 1991; Spafford, 1995). Surveys have shown that the interview has also been viewed as part of the process of providing candidates with a preview of life as a student in 46% of responding medical schools (Johnson & Edwards, 1991) and 25% of responding optometry schools (Spafford, 1995).

Using the interview for public relations type activities may be a function of two factors. To a certain extent, programs compete for a limited pool of candidates. This fact is particularly relevant to medical and dental

programs, which far outnumber optometry programs. Competition among optometry programs in Canada has not been a factor because only two schools exist. In areas where there is high competition, programs tend to expend extra money and effort to market their school. For example, some medical residency programs distribute advertising materials such as pens and mugs to potential applicants (Galazka, Kikano, & Zyzanski, 1994). This competitive atmosphere has been exacerbated by the documented decline in the number of applicants to medical programs (Petersdorf, 1989).

The tendency to promote a program to the candidate may depend on the interviewer's opinion of the candidate. One study of the employment interview found that when the interviewer makes an early favorable decision about a candidate, the interviewer tends to talk more than the candidate in an attempt to "sell" the candidate on the company (Anderson, 1960). Healthcare professional admission interviewers may be motivated to market their program only when they are impressed with a candidate.

Performance Prediction

A common purpose of the admission interview, related to candidate selection, is the desire to measure or predict aspects of performance (Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985; Spafford, 1995). In fact, 58% of optometry program respondents and 53% of medical program respondents indicated a desire to predict student success with their admission interview (Johnson & Edwards, 1991; Spafford, 1995). At least 80% of optometry and medical program respondents to surveys have indicated their interview is intended to assess non-cognitive/humanistic skills (Johnson & Edwards, 1991; Spafford, 1995). This purpose seems consistent with the belief that the interview may increase predictability by measuring qualities not assessed by other selection tools such as academic transcripts or standardized professional admission tests (Collins, White, Petrie, & Willoughby, 1995; Edwards, Johnson, & Molidor, 1990). The potential unique contribution of the interview is reduced in those programs that use the interview to measure cognitive skills (Johnson & Edwards, 1991; Spafford, 1995).

Much of the debate about the admission interview has centered around its desired or perceived predictive value. Studies in the Psychology literature provide descriptors of the "ideal" interview if its goal is predicting performance (Campion, Pursell, & Brown, 1988; Clayton, Baird, & Levinson, 1984; Dipboye, Fontenelle, & Garner, 1984; Heneman, Schwab, Huett, & Ford, 1975; Kesselman & Lopez, 1979; Maurer

& Fay, 1988; Sackett, 1987). The ideal interview is reliable and valid and it measures unique skills not tapped by other selection tools. The belief is that the reliable and valid interview must be highly structured (Campion, Pursell, & Brown, 1988). A highly structured interview uses a trained, panel interview team (i.e., more than one interviewer). Ideally, the same panel interviews all candidates. The interview questions are consistent across all candidates and they are derived before the interview through a "job-analysis" approach. This approach requires two separate groups of content experts to generate a set of descriptors of the successful "worker". Those descriptors, identified by both groups, form the basis for formulating interview questions. The possible answers to each question are anticipated and scored by at least one of the groups before the interview. The interviewers use the set of anticipated answers and their associated scores as a template with which to grade the candidate's answers. Edwards, Johnson and Molidor (1990) applied the theory of this type of highly structured interview to the medical school setting. By far, highly structured admission interviews are the exception and not the rule. Spafford (1995) found that only one optometry program posed the same questions in all their admission interviews and at only one-third of the interviewing optometry programs, had reliability or validity studies been conducted to determine the interview's format. Optometry admission committees may have recognized the potential impact of interviewer number on reliability because there is a greater tendency of optometry programs to employ a panel interview rather than an individual interview (Spafford, 1995). The reverse is true for medicine and dentistry (Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985).

Consideration of the predictive ability (i.e., the validity) of the interview involves consideration of its repeatability (i.e., its reliability) because the two concepts are related. A valid measure is a reliable measure, although reliability, in itself, does not guarantee validity. That is, validity depends on more than reliability; it also depends on the nature of the constructs measured and the type of criterion measure used (McDaniel, Whetzel, Schmidt, & Maurer, 1994; Messick, 1989). For instance, although low reliability will markedly lower validity, a very reliable measure which captures the wrong information will result in an invalid measure.

There has been a trend in the past several years to study factors that influence reliability and validity using meta-analysis approaches. These studies involve a statistical analysis of data from a large number of relevant research studies. One example is the meta-analysis study by Conway, Jako and Goodman

(1995). Their analysis incorporated inter-rater reliability coefficients from 70 published and unpublished studies. The overall mean inter-rater reliability of employment interviews was .70 with a 90% confidence interview that ranged from .39 to 1.00. In the presence of a perfectly reliable criterion, Conway, Jako and Goodman (1995) predicted that estimates of the upper limits of interview validity were considerably better for interviews with high structure (.67) than low structure (.34) where structure is defined by the level of question standardization and the use of actuarial methods of calculating the overall interview score. These values compared well with mean validities that had been corrected for criterion unreliability (Huffcutt & Arthur, 1994). Although interview validity depends on more than reliability, Conway, Jako and Goodman (1995) have argued that the main determinant of low validity in unstructured interviews is their low reliability. Meta-analytic type studies strongly suggest that validity will be highest for the structured, panel interview (Conway, Jako, & Goodman, 1995; McDaniel, Whetzel, Schmidt & Maurer, 1994;Wiesner & Cronshaw, 1988).

For the most part, the few studies that have evaluated the reliability of admission interview scores have found highly consistent (i.e., reliable) scores both between and within interviewers (McManus & Richards, 1989; Mitchell, Mitchell, & McGregor, 1987; Richards, McManus, & Maitlis, 1988). The exception to this finding is the study by Harasym, Woloschuk, Mandin, & Brundin-Mather (1996). Their study differed from the other studies because they embedded simulated medical school applicants (i.e., trained actors) into the pool of actual medical school applicants. Although interviewers knew there were some simulated applicants in the pool, they had no idea which applicants were "real". Although interview score reliability may be, in general, favorable, the predictive validity of the admission interview has not been found to be encouraging.

The ability of the admission interview to predict professional student performance has been low for both clinical and academic skills. There have been six studies examining the correlation between interview performance and clinical performance (Meredith, Dunlap, & Baker, 1982; Smith, 1991; Smith, Vivier, & Blain, 1986; Spafford, 1994b; Vargo, Madill, & Davidson, 1986; Walker, Killip, & Fuller, 1985). A positive correlation was found in only two of the studies (Meredith, Dunlap & Baker, 1982; Walker, Killip, & Fuller, 1985). The previously cited studies of interviews and clinical performance, plus two other studies (Bridle, 1987; Powis, Neame, Bristow, & Murphy, 1988) have examined the correlation of interview performance

with academic performance. A positive correlation was found in only two of these eight studies (Powis, Neame, Bristow, & Murphy, 1988; Spafford, 1994b). The frequent comparison of the admission interview performance with academic measures in the program such as the GPA seems somewhat ill-conceived because the two measures try to, or do, reflect different domains: the interview is intended to evaluate non-cognitive skills while the GPA is intended to reflect cognitive ability. There is wide recognition that interviews do not measure the same traits as academic grades (Edwards, Johnson, & Molidor, 1990; Litton-Hawes, MacLean, & Hines, 1976; Meredith, Dunlap, & Baker, 1982; Powis, Neame, Bristow, & Murphy, 1988; Spafford, 1995; Spooner, 1990). Perhaps the convenience of using numeric measures such as GPA has outweighed its inappropriateness. The interview's low predictive value may also, in part, be accounted for by the format of the "typical" admission interview. The predominating type of questions posed to candidates in healthcare admission interviews are factual and procedural (Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985; Spafford, 1995). Consequently, the most common interview experience encountered by an applicant to medicine, dentistry or optometry is to receive one or two semi-structured individual interviews given by interviewers with limited, if any, training, who intend to evaluate the candidate's humanistic qualities but more likely evaluate the candidate's knowledge or cognitive skills (Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985; Puryear & Lewis, 1981; Smith, Vivier, & Blain, 1986; Spafford, 1995). The tendency to provide a knowledge based interview may provide some justification for studying the correlation of interview performance with academic performance; however, such comparisons merely serve to highlight the incongruent relationship between the intent of the interview and its resultant impact.

The admission interview has not been the only admission variable unable to predict successful clinical performance in healthcare programs. Admission academic predictors correlate less with successful practice as the healthcare student progresses through the program (George, Young, & Metz, 1989; Gough & Hall, 1975; Murden, Galloway, Reid, & Colwill, 1978; Tarico, Altmaier, Smith, Franken, & Berbaum, 1986; Walker, Killip, & Fuller, 1985). Admission academic variables have been most predictive of success early in conventional healthcare curricula where performance is more based on fact recall and the emphasis is on the basic sciences rather than the clinical sciences which dominate the later part of the programs. Studies of the predictive ability of optometry admission academic measures show their ability to be limited to the early part of the program (Bailey, Voorhees, & Hanlon, 1983; Kegel-Flom, 1974a,

1974b, 1984, 1985; Ong, & Marchbanks, 1973). Optometry student GPAs, particularly in the first two years, have been best predicted by various combinations of sections of the standardized optometry admission test, the pre-optometry math-science GPA, the pre-admission college attended, and/or a standardized personality inventory. The California Psychological Inventory (CPI) has been the only optometry admission variable predictive of clinical success in an optometry program (Kegel-Flom, 1985). Interestingly, there appeared to be a gender-dependent correlation between CPI traits and instructor ratings of clinical performance. For men, achievement drive, self-confidence, and tolerance best correlated with their clinical performance. For women, self-confidence, assertiveness, and interpersonal effectiveness best correlated with their clinical performance. These findings suggest that the instructors may value or expect different skills in men and women.

Limited study has been conducted to ascertain why some healthcare programs choose not to interview applicants. Concerns about the interview's high costs (to the school and its applicants) in the presence of its low reliability and predictive value seem to be the main reasons for its exclusion (Smith, 1991; Smith, Vivier, & Blain, 1986; Spafford, 1995).

Possible Sources Of The Interview's Limitations

The main goal of a selection tool is presumably to determine a candidate's suitability for a specific task. Consequently, the "ideal" selection tool: 1) reliably measures candidate traits and skills necessary to perform the task, and 2) is free from environmental or rater effects. Consequently, an "ideal" selection tool tends to be described as value-free and, therefore, objective. This opens an interesting debate: are objective measures more reliable and predictive than subjective measures and is there such an entity as an objective measure? The reputation of the interview is that it is subjective in nature and this subjectivity is held to be largely responsible for its perceived and/or actual low reliability and validity. As a result, the interview's subjective quality has been used by some as an argument to support its elimination. If one looks beyond the literature on selection tools to some of the studies on educational test question styles, there are interesting findings that may have a relevance to other evaluation measures such as selection tools. For example, Van der Vleuten, Norman, and de Graaff (1991) argued that objectivity is a goal rather than a reality of assessment. There are always some influences external to candidate skill that affect the evaluation outcome. In fact, Van der Vleuten, Norman and de Graaff (1991) used the term

'objectified' rather than 'objective' to refer to test instruments that are designed to strive for objectivity while 'subjective' instruments are those with built-in significant environmental and/or rater effects that can alter outcome. Despite the assumption that the reliability and validity of subjective tests are significantly lower than that of objectified tests, this has not been found to be the case (Norman, Van der Vleuten, & de Graaff, 1991; Van der Vleuten, Norman, & de Graaff, 1991). In view of these studies of one field of evaluation techniques, the assumption that the selection interview is subjective and therefore unreliable and invalid should be examined in terms of whether any of the selection tools, labeled 'objective', are any more reliable or valid than those not so labeled. Another question to ask is whether the subjective nature of the interview is a strength rather than a detraction.

Models of Interview Variables and Processes

Models have been proposed to describe the variables and processes that may interact and affect the employment interview outcome (Arvey & Campion, 1982; Schmitt, 1976). Interviewer and applicant variables include: age, class, race, sex, and sexual orientation. Other participant variables include: physical appearance, psychological characteristics (e.g., attitude, intelligence, motivation, etc.), as well as verbal and nonverbal behavior. The applicant's educational and work background, job interests and career plans, experience and training as an interviewee, in addition to her/his perceptions regarding the interviewer, job and company may also play a role in the interview outcome. The interviewer's experience and training as an interviewer, perceptions of the job requirements, prior knowledge of the applicant as well as goals for the interview are also variables to consider. Finally, there are situational variables to consider in the interview outcome such as the political, legal and economic forces in the marketplace and organization, the role of the interview in the selection process, the selection ratio, the physical setting of the interview and the interview structure. With all of these variables potentially operating, evaluation of the interview is problematic. Researchers have worried that they will not be able to tease out the variables and processes causing measured effects. They have also worried that the impact of some variables may be hidden or minimized by other variables. As a result, there was a large movement by research psychologists in the 1970s away from evaluating the interview as a whole toward using micro-analytic strategies that tried to evaluate one or two aspects of the interview. By far, the most attention has been paid to interviewer effects.

Before considering the results of these microanalytic studies, consideration should be given to the types of research strategies that have been employed in these studies in an attempt to uncover the variables operating in a selection interview.

Interview Research Strategies

The three main research strategies employed by industrial and organizational psychologists to study selection interviews have been: 1) resumé (or "paper-people" interview) studies, 2) "in-basket" studies, and 3) videotape or field experiment studies (Arvey, 1979). Perhaps surprisingly, much of the research has not involved the latter strategy which most closely resembles the traditional face-to-face interview. The "interviewers" in these studies may be managers or recruiters but they are most often university students. The prevalent use of students in these studies may be, in part, a result of their inexpensive accessibility on university campuses where much of the research takes place. There has been debate about whether university students and managers behave similarly as raters. Hakel, Dobmeyer, and Dunnette (1970) found actual interviewers assigned different weights to academic standing and job experience when evaluating applicants than did university students. In two other studies, the reactions of managers and students were found to be similar (Bernstein, Hakel, & Harlan, 1975; Dipboye, Fromkin, & Wiback, 1975). Despite some similarities, Arvey (1979) urged researchers in his review of the literature to develop more generalizable results by using real-life interviewers.

The most frequently used research strategy for studying interviews involves a micro-analytic strategy called the resumé study or the "paper-people" interview (Arvey, 1979; Gorman, Clover, & Doherty, 1978). Resumé studies require the subject (the "interviewer") to evaluate a series of candidates for a given job or task based on a written resumé that usually includes a photograph. Subjects are provided with little information about the hypothetical hiring organization. Prior to the "interview", the investigators generate a set of resumés (e.g., 10), which include the candidates' qualifications for the job. They then select a set of names and photographs from a bank of hypothetical candidates. Names and photographs are assigned to resumés and given to half of the interviewers for their evaluation. The other half of the interviewers receive the same names and photographs assigned to different resumés of the set. The interviewers are unaware that the resumés given to other interviewers may differ from their set. This research strategy allows the investigators to manipulate only one or two candidate traits while other demographic candidate

data are kept the same. For example, candidate sex may be varied while candidate age, race, educational background and work experience are kept the same. Some investigators have manipulated other variables such as applicant age, attractiveness, race, visible physical disability or type of job. Resumé studies have been used in an attempt to control a number of other variables that could affect interview outcome in a face-to-face encounter. In some studies, more than one variable is examined so that within-subject differences can be studied in addition to or as opposed to between-subject differences. Arvey (1979) argued for strategies that investigated within-subject differences rather than between-subject differences. He postulated that the control of variables in the former strategy was more sound and allowed for more appropriate conclusions. It should be noted that the external validity or generalizability of paper-people interviews to that of face-to-face interviews has been questioned (Arvey & Campion, 1982; Gorman, Clover, & Doherty, 1978). The concern is that these two methods may represent paradigms that measure different interviewer behaviors. That is, raters may behave differently in paper-people interviews than in face-to face interviews, in part, because they encounter different types of candidate data. For example, raters can be influenced by the nonverbal behavior of applicants only in face-to-face interviews. Another potential problem with resumé studies is that many involve varying only one or two applicant variables. If the raters figure out what is being studied then they may consciously adjust their responses depending on what they think the researchers want to find. The mere awareness of the study's objective may cause the participants to inhibit their normally unconscious biases. Consequently, the monitored decisions of interviewers may differ from unmonitored decisions of the same interviewers. Studies in which researchers wish to detect or measure interviewer bias (e.g., racial intolerance) may obtain skewed results if the interviewers become aware of the study's goal. The raters may in fact overcompensate and judge the perceived disadvantaged interviewee more leniently to create a more socially desirable decision (Mullins, 1982).

The next most prevalent research strategy employed in the study of the interview is the "in-basket" study strategy (Arvey, 1979). It is plagued by many of the same drawbacks as the resumé studies. Subjects are asked to take on the role of a personnel director or manager who must work through an "in-basket" of work. The subject is asked to write memorandums or letters in response to each item in the basket. Typically, the "in-basket" contains information about the organization's departments and members (e.g., performance appraisal data, attendance information), as well as a series of personnel problems.

Participants might be asked to make decisions about hiring or promoting an individual. The characteristics of the individual to be hired or promoted will be varied among the participants. For example, the applicant might be male in some baskets and female in other baskets. The sex difference might be the only different data in the hiring decision. Like resumé studies, "in-basket" studies may not measure the same interviewer behavior as face-to-face interviews.

Arvey (1979) noted that the least frequent interview research strategy involved videotape studies or field studies. Videotape studies involve actual face-to-face interviews that have been previously videotaped. Attempts are made to create a consistent interview by posing the same questions to each candidate and having each candidate respond similarly. Later, the videos are viewed by participants who judge a candidate's suitability for a particular job. Typically, the participant views only one candidate. The dimension varied among the candidates is usually whether the person is a member of a visible minority. Often the study involves more than 75 participants (Arvey, 1979). In the past few years, a shift toward the use of field studies may be occurring. Field studies involve an examination of face-to-face interviews conducted in an actual hiring situation. The researchers work with the hiring personnel to control certain variables without interfering unduly with the hiring process. For example, Lin, Dobbins, and Farh (1992) and Prewett-Livingston, Feild, Veres, and Lewis (1996) manipulated the racial composition of actual interview panels in their studies of race effects on interview scoring.

Despite the limitations of each research strategy, a number of possible sources of the interview's reported low reliability and validity have been indicated. The research findings suggest that the interview is more a reflection of the interviewer's traits and biases rather than the interviewee's suitability for the task. Dimensions related to the interviewer that have been found to affect the interview outcome include: 1) the similar-to-me effect, 2) the contrast effect, 3) the halo effect, 4) rater distribution tendencies, 5) interviewer access to candidate data, and 6) stereotyping and biases. These interviewer-related phenomena have been reported in the Psychology literature within the context of job selection interviews. In general, these effects are exacerbated in the presence of an unstructured interview.

Similar-To-Me Effect

The similar-to-me effect describes the phenomenon in which a rater tends to give higher scores to candidates who demonstrate qualities similar to the rater. This effect has been documented, both in simulated and field interviews, when the rater and candidate are similar in terms of race, sex, education, or socioeconomic background (Frank & Hackman, 1975; Graves & Powell, 1988; Howard & Ferris, 1996; Ledvinka, 1972; Lin, Dobbins, & Farh, 1992; Peters & Terborg, 1975; Prewett-Livingston, Feild, Veres & Lewis, 1996; Rand & Wexley, 1975; Wexley & Nemeroff, 1974). This effect has also been shown in job performance evaluations of black and white grocery clerk applicants (Bigoness, 1976; Hamner, Kim, Baird, & Bigoness, 1974). The similar-to-me effect is supported by social identity theory which suggests that an individual's self-concepts are a product, in part, of their membership in groups they strongly value and to which they hold significant emotional importance (Tajfel, 1982). Membership in a common social group (e.g., racial similarity) could result in a rater favourably judging an individual (Tajfel, 1981). The similar-to-me effect raises the question of the degree of importance that interviewer-interviewee similarities and differences have in terms of such qualities as age, sex, race, and physical ability in influencing an interviewer's rating of an applicant. These types of considerations are discussed later in the section called, *Stereotyping & Biases*.

Contrast Effect

The outcome of an interview depends, in part, on the biases that the interviewer applies to the interviewee. Interview outcome also may be influenced by the interviewer's opinion of previously interviewed candidates. This type of rater error is known as the 'contrast effect' and its contribution to total interview score variance has been found to be significant in two studies (Rowe, 1967; Wexley, Yukl, Kovacs, & Sanders, 1972) and insignificant in two others (Hakel, Ohnesorge, & Dunnette, 1970; Landy & Bates, 1973). The studies by Hakel, Ohnesorge and Dunnette (1970) and Rowe (1967) have been criticized for their use of paper-people interviews. The latter study has also been criticized for its exclusion of average quality applicants. Wexley, Yukl, Kovacs and Sanders (1972) had subjects observe three structured, videotaped interviews. An equal number of female and male raters evaluated each interview sequence. The first two interviews were always of the same quality; that is, they were both of low, average or high quality. This strategy was employed to create a certain frame of reference for the third interview. The

candidate's responses to questions about educational background, work experience and extracurricular activities were varied in an attempt to control the raters' perceptions of the candidates. A panel of judges agreed that the answers provided in the interviews portrayed low, average or high quality candidates. Unfortunately, no data were provided about the judges (e.g., their sex) and little data were provided about what constituted a quality answer. Therefore, the gender biases built into the definitions of quality are unknown in this study. Despite these limitations, the results suggested a marked contrast effect. When an average applicant was preceded by two high quality or two low quality applicants, contrast effects accounted for 80% of the total interview score variance. It should be noted that all the candidates for the hypothetical sales job were men in this study. Presumably this technique was employed so that any gender-stereotypes the subjects may have associated with male candidates would be consistent across candidates.

Halo Effect

The halo effect occurs when an interviewer's overall rating of a candidate is unduly influenced by a single positive or negative trait (Hakel, 1971; Springbett, 1958). Because interviewers tend to weigh negative information more than positive information (Cohen & Etheredge, 1977; Hollman, 1972; Trent, 1987), the halo effect is more of an issue for single negative candidate traits than positive ones. Webster (1964) provided support for the argument that employment interviews are more of a search for negative data than positive data. He postulated that the emphasis is on the negative aspects of job applicants because interviewers are rarely praised for hiring good personnel but frequently berated when incompetent personnel are hired.

Rater Distribution Tendencies

Distribution errors occur when a rater's scores are predominantly lenient, neutral, severe or inconsistent with other raters (Edwards, Johnson, & Molidor, 1990; Markert & Shore, 1981). Markert and Shores (1981) studied both the difficulty and consistency ratings of untrained interviewers during one medical school's admission year. Difficulty was defined as the tendency of an interviewer to grade a candidate lower or higher than other interviewers, therefore, an interviewer's difficulty rating was equal to the difference between the interviewer's mean score and the interviewer group's mean score for the admission year. Consistency was defined as the degree of agreement among the three interviewers

rating the same applicant. It was in essence a measure of the reliability of an interview. The three interview scores were generated from three individual interviews as opposed to from one panel interview with three interviewers. Consequently, the three individual interviewers may have been scoring rather different interviews in terms of content and format. Despite this limitation, Markert and Shore pointed out that adjusting an interviewer's mean rating to the group mean was inappropriate because it assumed that interviewers would encounter, on average, equally competitive candidates. This was not necessarily the case because the main, if not sole, determinant of interviewer-candidate combinations was the availability of the participants at the interview time. The interviewers were categorized by a difficulty-consistency index such that a higher index represented a lenient, hard and/or inconsistent interviewer. Markert and Shore suggested that interview teams should be purposely arranged so that the total difficulty-consistency index did not exceed a certain pre-determined level. Using their acceptable index cut-off, one third of the applicants in the study encountered a combination of interviewers with unacceptable index totals. Their method was offered as a strategy for increasing fairness in interviewer assignments.

Markert and Shore's observation that the medical school administrators assigned interviewers mostly by their availability at the time of the interview is commonplace among optometry schools. Spafford (1995) found the interviewer-interviewee combinations were determined largely by interviewer availability in 11 out of 12 interviewing optometry schools. Marginal consideration was given to the interviewers' scoring history in two schools and to interviewer attributes in four schools.

Many candidates tend to receive similar scores. Three explanations may account for the tendency of many interviewers to assign different candidates alike scores: 1) the selection tool is insensitive to candidate differences, 2) the interviewer is insensitive to the differences among candidates, and/or 3) the interviewer is hesitant to use the interview to influence the candidate's chances of acquiring the position. One might argue that insensitivity to candidate differences is acceptable if the differences are irrelevant to the position. Ideally, the construction of interviews should allow differentiation of candidates based on relevant traits only.

Interviewer Access To Candidate Information

When interviewers are provided with few guidelines regarding the interview's structure or purpose, they are more likely to be inconsistent in their scoring and more likely to make early decisions in the interview. Springbett (1958) found interviewers tended to make summative decisions about the candidate in the first four minutes of an unstructured interview where questions were not consistent across candidates and responses were not behaviorally anchored. This suggests that the more information the interviewer has, the more likely it is that the interviewer will make a reliable and valid evaluation of the candidate. Although information about the purpose and structure of the interview is usually helpful, information about the candidate prior to the interview may have detrimental effects. In fact, influencing the interviewer prior to the interview may exacerbate the tendency of interviewers to make their final decision early in interviews (Farr, 1973; Springbett, 1958). Farr (1973) found the interviewer's early impressions were more influential than subsequent factual information in determining the interviewer's rating of candidate sociability. He also found that when interviewers had to make only one decision in the interview (e.g., hire/reject), they tended to make up their minds early in the interview and then lose attention. Interviewers, who were asked to make evaluations of the candidate after each unit of information, were more likely to change their ultimate decision regarding hiring.

There is considerable evidence that exposure to application material prior to a job interview can bias the interviewer's evaluation of the interviewee's performance. Interviewers engage in "expectancy confirmation" behaviors when their conduct during the interview confirms their first impressions of the candidate gleaned from pre-interview candidate data (Dougherty, Turban, & Callender, 1994). In the presence of expectancy confirmation behavior, pre-interview evaluations have been shown to positively correlate with post-interview hiring decisions (Dipboye, 1982, 1992; Macan & Dipboye, 1990). Dipboye (1982, 1992) developed a model called the self-fulfilling prophecy in selection interviews. The model describes both cognitive and behavioral biases that mediate the impact of pre-interview impressions on the applicant's final evaluation.

Cognitive biases occur when interviewers support their first impressions by distorting information using selective attention and recall of information. For example, raters who observe videotaped interviews have shown the best recall for information that matched their pre-interview impression (Dipboye, Stramler &

Fontelle, 1984). Raters have also shown better recall of interview content when they did not receive any pre-interview data than when they did receive the data (Dipboye, Stamler, & Fontelle, 1984). Macan and Dipboye (1994) found that the stronger the applicant's written application was, the more likely the applicant was perceived as answering the questions better, displaying more appropriate traits for the job and making more favorable statements.

Behavioural biases refer to interviewer behavior that confirms their first impressions of an applicant. Interviewer behavior biases can influence: 1) the regard (positive or negative) toward the applicant, 2) the focus of the interview, 3) the time spent on aspects of the interview, and 4) the type of information-gathering strategies.

A "positive regard" towards the applicant refers to the interviewer's use of supportive questions, agreement with the applicant, verbal encouragement, laughter, a positive style, favorable orientation towards an offer, and vocal style. Dougherty, Turban and Callender (1994) found that the interviewer's first impression from examining test scores as well as the educational and employment history were positively correlated with the interviewer's positive interview style, vocal style and a favorable orientation towards extending a job offer.

"Interview focus" involves whether the interviewer's questions focus on examining candidate qualifications, providing job information, or "selling" the company or job. Interviewer's first impressions from pre-interview information have tended to positively relate to providing information and selling the company or job (Anderson, 1960; Dougherty, Turban, & Callender, 1994; Phillips & Dipboye, 1989; Sydiaha, 1961).

"Time spent" refers to the total interview duration, the interviewer's speaking time and the applicant's speaking time. Findings on time studies are equivocal. Three studies (Anderson, 1960; Phillips & Dipboye, 1989; Tullar, 1989) reported interviewers spent more time talking with applicants for whom they had favorable impressions while another study (Dougherty, Turban, & Callender, 1994) found no such relationship.

"Information-gathering strategies" involve examining the total number of questions posed by the interviewer, the number of open-ended versus closed ended questions, and the number of initial questions versus follow-up or probing questions. Researchers have not agreed about whether interviewers' information-gathering strategies are affected by first impressions. McDonald and Hakel (1985) and Sackett (1982) found no real evidence for confirmatory questioning strategies. Macan and Dipboye (1988) observed that more difficult and fewer positive questions were posed by interviewers who assessed poorly qualified candidates than by interviewers who assessed well qualified applicants. Despite their findings, they concluded there was little evidence to support pre-interview impressions affecting questioning biases because the interviewers did not structure their questions in a way which forced applicant responses to confirm their first impressions. In fact, confirmatory questioning strategies have been observed only in two studies and these studies were the only ones in which interviewers were allowed to generate their own questions (Binning, Goldstein, Garcia, Harding, & Scattaregia, 1988; Dougherty, Turban, & Callender, 1994). In these studies, interviewers gathered less information from candidates when the first impression was favorable. The strongest evidence for the existence of expectancy confirmation behaviors has been shown by Dougherty, Turban and Callender (1994). They attributed their success to two methodological strategies: 1) they studied field rather than simulated interviews therefore the first impressions were real rather than manipulated, and 2) they allowed their interviewers to generate their own questions rather than pick from a predetermined list.

Interviewer access to a candidate's written file before or during an interview has also been found to significantly affect the outcome of the admission interview (Elam & Andrykowski, 1991; Litton-Hawes, MacLean, & Hines, 1976; Shaw, Martz, Lancaster, & Sade, 1995; Spafford, 1994b; Tarico, Altmaier, Smith, Franken, & Berbaum, 1986). The presence of the written application in the interview can become a distraction for the interviewer and a deterrent to communication according to Litton-Hawes, MacLean, and Hines (1976). When interviewers are allowed to have the written application in the interview, they tend to rely on the application particularly during the early part of the interview. As a result, the interviewers spend more time looking at the application than the applicant. The less frequent eye contact appears to deter conversation (Litton-Hawes, MacLean, & Hines, 1976). The presence of the application in the interview may also play a role in the interviewer asking relatively closed-ended, focused questions in an attempt to verify application data. Litton-Hawes, MacLean, and Hines (1976) found in their analysis of videotaped

interviews that the impact of this type of questioning seemed to be that candidates were hindered later in the interview when they were presented with more open-ended, broader questions.

Admission interview scores have significantly correlated with academic admission variables, such as university transcripts and/or standardized test scores, only when interviewers for medicine (Shaw, Martz, Lancaster, & Sade, 1995; Tarico, Altmaier, Smith, Franken, & Berbaum, 1986) or optometry (Spafford, 1994b) were allowed to read the candidate's application prior to the interview. Without access to the applications, interviewer scores were not correlated to admission academic variables in these studies.

It could be that the impact of candidate data on the interview depends on the interviewer's biases and the type of data being considered. Elam and Andrykowski (1991) examined the correlation between interview scores and other types of data such as candidate sex and candidate academic performance. Interviewers were allowed access to the medical school candidate's written file. The interview scores were positively correlated only with the grades. Their findings provide further evidence that interviewers are strongly influenced by the candidate's academic performance; however, it can not be concluded that interviewers are unaffected by the candidate's sex. The only conclusion that can be made is that any impact candidate sex or gender had on interviewers was outweighed by the impact of candidate grades.

Stereotyping and Biases

Stereotyping involves two processes: 1) a set of traits is formed to describe a certain group of individuals, and then 2) these traits are assigned to an individual who is a member of the group (Arvey, 1979). In fact, just the perceptions that an individual is a member of a group may be enough to assign the group's traits to that person. The act of stereotyping sacrifices group diversity to group homogeneity. The group may be defined by, among other traits, age, class, gender, race, religion, or sexual orientation. There is some evidence that interviewers may approach the interview with stereotypes of the idealized job candidate against which the actual applicants will be judged (Bolster & Springbett, 1961; Hakel, Hollman & Dunnette, 1970; Sydiaha, 1961; Webster, 1964). According to London and Hakel (1974), these ideal stereotypes diminish or change as the evaluation of the interviewee progresses.

Gender Biases

There is considerable evidence that candidate sex and/or gender affects the outcome of job interviews. When female candidates are compared with male candidates using paper-people interviews, women are: 1) more likely to receive lower interview scores, 2) more likely to receive lower starting salaries, and/or 3) less likely to be recommended for managerial positions (Cohen & Bunker, 1975; Dipboye, Arvey & Terpstra, 1977; Dipboye, Fromkin, & Wiback, 1975; Haefner, 1977; Heneman, 1977; Muchinsky & Harris, 1977; Rosen & Jerdee, 1974a, 1974b; Shaw, 1972; Zikmund, Hitt, & Pickens, 1978). The devaluation of women in interviews is most evident when the job is either held predominantly by males (Muchinsky & Harris, 1977) or perceived as demanding and complex (Rosen & Jerdee, 1974a). Although the majority of studies have compared the evaluation process of women and men applying for skilled trades and professions, some attention has been paid to unskilled trades. Using paper-people interviews, the employment potential of women has been found to be lower than men when applying for positions such as automobile sales representative or wholesale hardware shipping and receiving clerk, while the reverse has been found for positions such as telephone operator or office receptionist (Cash, Gillen, & Burns, 1977). These findings suggest that interviewers are susceptible to gender-stereotyping.

The association of certain characteristics with men and women is often called sex-stereotyping. Unfortunately, the term implies a biologic explanation for why careers like receptionist, nurse or dental hygienist are assumed to be women's work when in fact the assumption is a result of gender construction. The term, gender-stereotyping seems a more apt term. Unfortunately, the use of the concept, gender-stereotyping, supports the belief that all women are alike, thereby ignoring distinctions among women based on age, class, culture, race or sexual orientation. The same can be said of the homogenization of male behavior. An additional problem with gender-stereotyping is that it implies traits belong exclusively to one gender or another.

Traits are not sex-determined, although they may be sex-related. There is ample evidence that demonstrates how various traits become associated with a given sex (e.g., women are the care-givers). This association happens through the construction of gender in the home, the school, the workplace, and the community. Kessler, Ashenden, Connell and Dowsett (1987) describe "gender-regimes" in the school. The term is used to refer to the "pattern of practices" that constructs and reinforces gender in the

institution. In so doing, different levels of power and prestige are assigned to these practices and a sexual division of labour follows. Kelly's (1985) description of the impact on girls of science being masculine is a powerful example of gender regimes in the school.

Rosen and Jerdee (1976a) found common stereotypes associated with males included traits such as adventurous, competitive, objective, dominant, decisive, and rough, whereas females were associated with traits such as compassionate, dependent, submissive and emotional. Cecil, Paul and Olins (1973) assessed the extent to which raters judged 50 personal characteristics as more important for one sex than the other in a "white-collar" worker. In general, more clerical and cosmetic standards were used to evaluate women while more aggressive and persuasive standards were used to evaluate males. The implication of these findings is that a source of gender discrimination may be inherent in a selection tool that is biased towards identifying socially constructed qualities more prevalent in one sex than the other. Unfortunately, Cecil, Paul and Olins did not clearly define "white-collar" worker. Raters could have made their judgments assuming "white-collar" worker meant receptionist just as easily as administrator. It has been shown that without specific task information, raters are more likely to use gender-stereotypes in their judgments (Bodenhausen & Lichtenstein, 1987; Tosi & Einbender, 1985; Wood & Karten, 1986). Cecil, Paul and Olins' vague description of job-type led Gardner and Discenza (1988) to examine how raters would evaluate the same 50 personal characteristics as applicant-sex (female or male) and job-type (clerical or managerial) were varied. They found that job-type was a much stronger determinant than applicant-sex of what qualities were important for a job. A potential weakness of Gardner and Discenza's study was their failure to indicate the sex of their raters. Without these data, the gender bias of the raters is unknown.

It has been well documented that the interview scores of women are, in part, a function of the type of position being sought. Most of the supporting studies deal with employment interviews for skilled trades or management positions rather than admission interviews for healthcare professional programs. The studies on this latter issue are equivocal. Clayton, Baird, and Levinson (1984) found female medical applicants received slightly lower interview scores than male applicants while Elam and Andrykowski (1991) found no such difference. As noted earlier, other admission candidate data may have affected interviewers so much that the impact of candidate sex was obfuscated in Elam and Andrykowski's study.

Historically, medicine, like dentistry and optometry, has been male-dominated. The medical profession has existed for centuries, yet it was not until 1849 that a woman graduated as a physician in the United States (McAnarney, 1977). The number of women applying for and receiving offers of admission did not significantly increase in male-dominated healthcare professions until the 1970s. The burgeoning "women's movement" was credited, in part, with the establishment of legislation like the U.S. Federal Title IX Education Amendment Act of 1972. This Act prohibited educational institutions, which received Title IX funds, from discriminating against applicants based on sex. Prior to 1972, educational institutes could actively discriminate against women. This method of blocking certain career paths of women has been called social selection (Cole, 1986). In addition, self-selection kept many women from pursuing male-dominated professions (Cole, 1986). This occurred through the socialization of girls and women; a process that convinced women they could not or should not pursue certain careers. Kelly (1985) shows how girls' experiences of science convey an image of science as masculinized. For example, she described how science is usually taught by male teachers (while most other subjects are taught by female teachers), using textbooks with male scientists performing tasks with applications that are oriented to male interests (e.g., guns, cars, football). The masculine packaging of science has been an important factor in far fewer women than men pursuing science, particularly physical science (Kelly, 1985). Most healthcare professional programs include sciences in their prerequisite academic criteria. This requirement can be a potential problem for females who are socialized to avoid or dislike science, only to find later that it is a fundamental requirement of many career options.

Women, consciously or unconsciously, face mixed messages about pursuing male-dominated professions such as medicine, dentistry and optometry. For instance, the people-oriented, care-giving aspects of the optometric profession might be an attraction for women who have been socialized since childhood to orient towards relationships and care-giving (Kelly, 1985; Thorne, 1992). Conversely, the socialization of girls regarding physical sciences may result in the prerequisite background for optics (i.e., physics and calculus) being a deterrent to women considering optometry as a career.

The number of women applying for and receiving offers to optometry has virtually equaled that of men in the past five years. This new equality (in terms of numbers) reflects both changes in self-selection and

social selection. The most obvious change in gender-based social selection has been the omission of information about candidate sex from admission data by some optometry programs. However, the question remains: Are any of the selection tools used by programs like optometry gender-biased? A plethora of studies, showing the employment interview outcomes of women differ from men, makes the hypothesis plausible that professional program admission interviews also affect women and men differently. In professions like optometry, where the numbers of admitted female and male students have become similar, some might argue that obviously the selection tools are not biased. However, consideration of the previously cited studies suggests gender-based biases are likely. In addition, it is worthwhile considering that the feminization of certain healthcare professions, such as optometry, might occur at a faster rate if the masculine packaging of Science was eliminated from the educational system. That is, with a greater number of qualified women in the applicant pool, there might be more women than men rather than equal numbers being admitted to these professional programs.

Age Biases

Age stereotyping and biases in the interview setting have not been researched extensively; however, age stereotyping was documented by Rosen and Jerdee (1976b) in a study related to job selection. Over 100 business students and realtors were asked to imagine they were going to meet two male applicants: one was 30 years old and the other was 60 years old. The participants then indicated the degree to which 65 characteristics described the average 30-year-old male and the average 60-year-old male. When compared to the 60-year-old male, the 30-year-old was viewed as significantly more 1) productive, 2) efficient, 3) motivated, 4) capable of working under pressure, 5) ambitious, 6) eager, 7) future oriented, 8) receptive to new ideas, and 9) adaptable. The average 60-year-old male was described in much more negative terms in that he was viewed as significantly more accident prone, rigid and dogmatic. In another study (Rosen & Jerdee, 1976c), university students viewed older employees as: 1) less promotable, 2) more resistant to change, 3) less physically capable, and 4) less likely to have organizational support for retraining opportunities than younger employees. These biases were solicited using an "in-basket" methodology. The variable in the in-basket was employee age. Interviewer evaluations have been significantly influenced by candidate age according to Haefner (1977). In the case of barely competent

candidates, age appeared to play no role; however, among highly competent candidates, younger applicants were preferred over their older counterparts.

Disability Biases

Contradictory findings exist among studies examining the reactions of employers or university students to job applicants with and without disabilities. Studies have compared applicants with no known disabilities, visible disabilities (e.g., cleft lip/palate, atrophied arm, wheelchair mobile), and/or hidden disabilities (e.g., psychiatric history, drug/alcohol addiction, seizure disorder). Some researchers have reported that hiring decisions are not significantly affected by the presence of a visible disability (Krefting & Brief, 1977; Shaw, 1972), while others have found a significant antagonistic bias against applicants with visible disabilities (Johnson & Heal, 1976; Scheuerle, Guilford & Garcia, 1982). In certain situations, applicants with visible disabilities have been perceived as being more motivated and more likely to become a long-term employee than those without disabilities (Krefting & Brief, 1977). Shaw (1972) interpreted favorable perceptions of applicants with visible disabilities as an indication that participants viewed these candidates as courageous individuals who had overcome physical adversity rather than as employment risks.

Hiring decisions have been more negative when the applicant's disability is hidden rather than self-evident (Bordieri & Drehmer, 1986; Drehmer & Bordieri, 1985; Stone & Sawatzki, 1980). In these studies, the hidden disability involved a psychiatric condition. Rose and Brief (1977) conducted the only study in which the presence of a hidden disability (i.e., seizures under medical control) had no significant deleterious affects on the applicant's chances of being hired for a job which would require significant public exposure. Interestingly, however, applicants with a history of seizures were found to be more suitable for jobs demanding minimal public contact than applicants without a history of seizures. When faced with applicants who have a psychiatric history, employers may be hesitant to hire them because the disability is poorly understood and perceived as uncontrollable (Hartlage & Roland, 1971; Nagi, McBroom & Colletts, 1972). Concerns of liability likely also affect the hiring decision.

Almost all the studies investigating applicants with disabilities have used a resumé-type method. Arvey (1979) criticized this methodology because the participants' responses might not be true reflections of

their natural biases. Johnson and Heal (1976) tried to solve the methodological problem of paper-people interviews by comparing the treatment of an individual who was interviewed by 50 actual employment agencies. The able-bodied subject appeared in a wheelchair at half of the agencies. The behavior of employment agency representatives was significantly affected by the presence of the applicant's wheelchair. When in a wheelchair, the agencies offered her: 1) fewer future job interviews, 2) a more gloomy estimation of the job market, 3) a lower probability of getting the kind of job being sought, and 4) more discouragement about seeking a job with public exposure. A criticism of Johnson and Heal's study is that the "job applicant" was one of the researchers. It is possible that their results were influenced by one of the researchers doing the ratings herself.

Methodological differences may not account entirely for these disparate findings. In addition to the type of disability likely playing a role in hiring decisions, the cause of the disability may also influence whether the employer perceives it positively or negatively (Bordieri & Drehmer, 1986; Florian, 1978). The findings of Bordieri and Drehmer (1986) suggest that the degree to which 'employers' attribute personal responsibility for the applicant's disability appears to be paramount to hiring decisions. They found applicants who were perceived as personally responsible for their disability (e.g., applicant abused drugs while on military leave) were less likely to be recommended for the job than those not viewed as the cause of their disability (e.g., applicant became addicted to a drug subsequent to being treated for an injury sustained during military service).

Race Biases

A relatively small number of studies have examined the effect of race on the employment interview. Most researchers have used the resumé approach, some have used the videotape strategy and few have employed actual field interviews. In all cases, race has been examined in terms of "black" and "white" participants. The findings have been mixed. The results of some studies have suggested applicant race has little or no effect on interview ratings (Haefner, 1977; Rand & Wexley, 1975; Schmitt & Hill, 1977; Webber & Orcutt, 1984; Wexley & Nemeroff, 1974), whereas differences have been suggested both in favour of black applicants (Bigoness, 1976; Mullins, 1982) and white applicants (Barr & Hitt, 1986; Campion, Pursell, & Brown, 1988; McDonald & Hakel, 1985). Those researchers who have found

interview ratings favour white over black applicants have concluded black applicants are disadvantaged in employment selection. Those who have found black applicants are favored over white applicants have offered a reverse discrimination interpretation. That is, if white interviewers realize the study is looking for racial differences and they are afraid of being labeled intolerant or racist, then they may hesitate rating a black applicant poorly and actually inflate the interview rating.

Finding a "race effect" will depend, in part, on the methodological approach employed. Concern has been raised that findings from simulated interviews such as the prevalent resumé studies may not generalize to actual field interviews (Arvey, 1979; Arvey & Campion, 1982; Gorman, Clover, & Doherty, 1978). In addition, any "race effect" present may be masked by other participant variables. For example, Mullins (1982) found white college students rated videotapes of black applicants higher than similarly qualified white applicants only when applicant quality was low. When the quality was high, no racial differences were found. This suggests that applicant quality impacts interview ratings more than applicant race.

The majority of studies examining race effects in interviews have used only white interviewers who rate candidates individually. More recent studies have begun to study the effects of varying both applicant and interviewer race as well as interviewer number (Lin, Dobbins, & Farh, 1992; Prewett-Livingston, Field, Veres, and Lewis, 1996). Both these studies found the similar-to-me effect present in field interviews where interviewers ranked racially similar candidates higher than racially dissimilar candidates. However, Prewett-Livingston, Feild, Veres, and Lewis (1996) also found that the racial composition of the interview panel is another variable affecting candidates' ratings. The similar-to-me effect was only present when the racial composition of the interview panel was balanced (i.e., two black and two white interviewers). Davis, Strube, and Cheng (1995) also found that racially balanced groups are more likely to identify with their own racial group than racially unbalanced groups. Prewett-Livingston, Feild, Veres, and Lewis, (1996) found a different rating pattern among racially unbalanced panel interview teams. When the interview panel was primarily white (i.e., one black interviewer and three white interviewers), white candidates received significantly higher scores from all interviewers, regardless of interviewer race. They referred to this rating pattern as the majority-race rating effect. When the interview panel was primarily black (i.e., three black interviewers and one white interviewer), the majority-race rating effect was also noted albeit not at a significant level. That is, black candidates tended to receive higher scores than white candidates,

regardless of interviewer race. Prewett-Livingston, Feild, Veres, and Lewis, (1996) referred to the work of three other studies on racial identification to explain their results. Doise (1978) and Turner, Hogg, Oakes, Reicher, and Wetherell (1987) postulated that at least two members of a group must be present to create group identification. Without another member of the same race on an interview panel to enhance racial group identification, sole black or white raters on an unbalanced interview panel are more likely to identify with their interview panel than with their racial group (Davis, Strube, & Cheng, 1995).

There is other evidence, albeit circumstantial in part, to suggest that racial biases do affect interview ratings. Race relations among strangers have been observed to be tense as a result of fear, suspicion, and moral contempt (Anderson, 1990; Blauner, 1989). In most situations, interviewers and applicants are essentially strangers. In addition, cultural misunderstandings may result from differences in both verbal and nonverbal behavior (Kochman, 1983; Parsons & Liden, 1984). These errors are exacerbated when there are class differences among people (Glasgow, 1981). McGovern and Howard (1978) found support for cross cultural misunderstandings. They reported that perceptions of the applicant's communication ability, self confidence and intelligence were significantly affected by her/his duration of eye contact, voice modulation, speech disturbances and energy level. Interviewers are also affected by the candidate's hand and arm gestures, posture and movements of the body (McGovern & Howard, 1978). Nonverbal cues such as facial expression, posture, and certain aspects of voice do differ between blacks and whites (Fugita, Wexley & Hillery, 1974; Parsons & Liden, 1984). Neckerman and Kirschenman (1991) suggested that inner-city black job applicants tended to fail subjective tests of productivity given by white, middle class interviewers. The lack of experience blacks and whites had with each other's culture was suggested to be an important determinant of poor interview ratings.

Candidate Self-Presentation Styles and Strategies

As suggested in the previous section, the manner in which the candidate presents him/herself in the interview affects the interviewer's evaluation of the candidate. The impact of an interviewee's social skills is one of the candidate variables that must be considered when evaluating interview outcome. Social skills involve: 1) verbal behaviors, such as asking questions and initiating conversation, 2) nonverbal behaviors, such as posture, eye contact, and gestures, and 3) reciprocity in communication, through reinforcing conversation or speaking at appropriate times (Liberman, Vaughn, Atchison, & Falloon, 1977).

The process of learning social skills is an important part of learning a society's communication system and one that develops early in life. Birdwhistle (1970) postulated that children internalize the communication system of their society by the time they are six years old. Social skills play a role in the interview. This is illustrated by difficulties that vision-impaired interviewees have in demonstrating appropriate, timely, social skills in interviews when they cannot see the nonverbal responses of the interviewer (Trent, 1987).

Recognizing that the interviewee is not a passive element in the interview outcome has led to the study of candidate self-presentation styles and strategies (Dipboye & Wiley, 1977, 1978; Fletcher, 1990; Fletcher & Spencer, 1984; Gifford, Ng, & Wilkinson, 1985; Howard & Ferris, 1996; McGovern & Tinsley, 1978; Parsons & Liden, 1984; Trent, 1987; Young & Beier, 1977). Self-presentation includes the candidate's verbal behavior, nonverbal behavior and personal appearance. Most of the research on self-presentation has focused on verbal and nonverbal behavior because the role of personal appearance seems established. Regardless of sex, candidates judged to be attractive are rated higher in an interview than candidates judged to be unattractive (Cash, Gillen, & Burns, 1977; Dipboye, Arvey, & Terpstra, 1977).

Candidate nonverbal behavior has been shown to significantly influence the interviewer's perceived competence of the candidate (Gifford, Ng, & Wilkinson, 1985; Howard & Ferris, 1996; Imada & Hakel, 1977; McGovern & Tinsley, 1978; Parsons & Liden, 1984; Young & Beier, 1977). Candidates who smile, nod their heads, and make more direct eye contact are perceived as more competent than candidates who demonstrate lower levels of these types of nonverbal behaviors. The relative impact of candidate nonverbal behavior, however, has been shown to be lower than that of candidate resumé credentials (Rasmussen, 1984; Wexley, Fugita, & Malone, 1975) or candidate verbal content in the interview (Hollandsworth, Kazelskis, Stevens, & Dressel, 1979; Rasmussen, 1984).

Verbal and nonverbal self-presentation styles have been investigated as a function of a passive-aggressive continuum. For instance, candidates who portray more aggressive verbal and nonverbal behaviors tend to be judged as better able to express themselves and more knowledgeable (Fletcher, 1990). However, interviewers do not appear to like excessive self-promotion in a candidate, as indicated by significantly lower interviewer ratings of such candidates (Baron, 1987) and significantly lower perceptions of candidate-interviewer similarity (Howard & Ferris, 1996).

Dipboye and Wiley (1977; 1978) found that, independent of interviewee sex, male interviewers rated moderately aggressive behavior more favorably than passive behavior for a management position. Dipboye and Wiley interpreted their findings as evidence that candidate self-presentation rather than candidate-sex determined interview outcome. The methodology employed in their studies may limit the impact of their findings because of the use of videotaped rather than field interviews and the exclusive use of male interviewers. This latter approach may have resulted in a male standard being used to determine what behavior was necessary for the management position. It remains unknown as to whether female interviewers would value the same behavior as male interviewers for a management position. From the interviewee's perspective, there is evidence that interviewer gender is a determinant in an interviewee's self-presentation style (Fletcher & Spencer, 1984). Female and male candidates have reported that their presentation style was less open and honest, and the likelihood of disagreeing with an interviewer was lower, when the interviewer was male rather than female (Fletcher & Spencer, 1984).

It is important to note that in the studies by Dipboye and Wiley (1977; 1978) the interviewees were actors who were asked to portray a level of aggression that was not necessarily consistent with their own personality. Therefore, what Dipboye and Wiley demonstrated is that passive and aggressive behavior can be demonstrated on request by women and men but they failed to show whether a certain type of behavior on the passive-aggressive continuum was more likely in, or preferred by, a certain gender. There is evidence that self-presentation style may be gender specific. Fletcher (1981) reported that female interviewees preferred a less aggressive style of self-presentation than male interviewees. If this is so, then a women applying for a position where aggressive behavior is preferred may encounter one of two scenarios. If she behaves as she usually would and presents herself more passively, then she may be marked down in the interview. Alternatively, through interview experience, she may have learned that aggressive behavior is valued and thereby consciously portray a behavior not consistent with her personality. In a more recent study, Fletcher (1990) found support for the hypothesis that candidate self-presentation strategies are related more to interview experience than candidate personality in that interviewees learn to portray the image they believe the selection committee wants to see.

Dipboye (1982, 1992) has proposed that the interviewer's behavior may have an impact on the job applicant's behavior. In fact, job applicants have been shown to act more confidently and build a better rapport with interviewers when the interviewers' behavior was favorable toward the applicants (Dougherty, Turban, & Callender, 1994). The impact of this dominos-type behavioral effect on the final hiring decision can be significant. Dipboye's model of the selection interview portrays the post-interview evaluation as correlated with the interviewer's pre-interview first impressions and interview behavior. That is, interviewers tend to behave in a way that confirms their first impressions and their behavior influences the applicant's behavior in a way that further confirms these first impressions. As a result, the applicant's behavior contributes towards the interviewer's first impression becoming a self-fulfilling prophesy of the final decision to hire.

Strategies for Improving Interview Reliability and Validity

In one of the earliest studies of the employment interview, Scott (1915) reported low interview evaluation reliability for six personnel managers who separately interviewed the same 36 sales applicants. The problem of low interview reliability has been a persistent theme in the Psychology literature ever since then. Typically, one of two strategies has been employed to reduce interview variability. One strategy has focused on structuring interview content to achieve standardization of the dimensions on which data are obtained (Campion, Pursell, & Brown, 1988; Janz, 1982). Another strategy has been to train interviewers to recognize and eliminate errors in information gathering and interpretation (Howard & Ferris, 1996; Schuh, 1973; Wexley, Sanders, & Yukl, 1973). The goal of both strategies is to reduce interviewer effects on the interview. Occasionally, both strategies are advocated (Edwards, Johnson, & Molidor, 1990). The relative importance of these two strategies on interrater reliability has not been extensively studied; however, there is evidence that increasing interview structure has a greater effect than interviewer training (Heneman, 1975; Mauer & Fay, 1988).

Conway, Jako and Goodman (1995) cautioned that inter-rater reliability is affected by a number of factors including whether an individual or panel interview format is adopted. In theory, if two panel interviewers agreed perfectly about how to evaluate and interpret applicant performance, then their rating of an applicant should be identical and the reliability would be at its maximum. If these same two interviewers interviewed the applicant separately (i.e., individually), then the inter-rater reliability would be lower

because the applicant could not possibly perform in an identical manner for both interviews. Therefore, inter-rater reliability in a panel interview situation reflects only one type of inconsistency; i.e., the level of disagreement among interviewers about the applicant's performance. In contrast, inter-rater reliability in an individual interview reflects this same type of agreement (or disagreement), but it also reflects the level of inconsistency in applicant performance across interviews. Conway, Jako and Goodman (1995) found support in their meta-analysis of the employment interview for the belief that inter-rater reliability is lower for individual interviews than for panel interviewers. Because individual interview reliability depends on the two types of variability, Conway, Jako and Goodman (1995) proposed that individual interview reliability coefficients were better indicators of the upper limit of interview validity.

Conway, Jako and Goodman (1995) identified a number of other factors in addition to the use of an individual versus panel format that moderate or influence inter-rater reliability. They found inter-rater reliability was significantly increased by: 1) standardizing questions, 2) training interviewers, and 3) calculating the overall interview score using an actuarial method (rather than a subjective method). Using a job-analysis approach to interview appeared to increase inter-rater reliability, albeit indirectly. Upon repeated interviews, an applicant's performance should be more consistent if the applicant encounters standardized interview questions in each of the interviews. Using this argument, standardizing questions should significantly increase inter-rater reliability for individual interviews but not for panel interviews. Conway, Jako and Goodman's meta-analysis found partial support for this hypothesis; standardizing questions improved the inter-rater reliability for both individual interviews and panel interviews, although the improvement was considerably greater for the individual interviews. The presence of a positive impact of standardizing questions on panel interviews suggests that there is more than one explanation for the improvement in inter-rater reliability. Conway, Jako, and Goodman, (1995) argued that standardized questions may provide a more job-relevant sample of applicant performance, thereby allowing interviewers to evaluate the information more effectively by avoiding information-processing errors. The likelihood of maximizing interview validity is greatest when reliability is increased through greater interview structure and interviews are conducted in a panel format (Conway, Jako, & Goodman, 1995; McDaniel, Whetzel, Schmidt, & Maurer, 1994; Wiesner & Cronshaw, 1988).

If interview content is an important issue in reducing interviewer effects, then an important question must be addressed: To what extent do the architects of interview content, consciously or unconsciously, build biases into the interview? In general, the more powerful positions in Western businesses and academic institutions are most often held by middle-class, caucasian, heterosexual men. If homogeneity among the decision makers who develop and/or dictate the structure of the interview is not reflected in the applicant population, then candidates may be evaluated using an inappropriate, biased standard. There has been no research on this aspect of interview development to date.

The ability of interviewer training to affect reliability may be greatest in the reduction of contrast effects and rater distribution tendencies (Fay & Latham, 1982; Wexley, Sanders, & Yukl, 1973). Howard and Ferris (1996) found that the perceived competence of applicants who engaged in self-promotion behaviors significantly influenced trained interviewers less than untrained interviewers. Unfortunately, the lack of control-group experimental designs has been problematic for much of the research on interviewer training (Spool, 1978). Efforts to reduce interviewer effects appear to be minimal in admission interviews for healthcare professional programs, as the use of highly structured interviews and rigorous interviewer training is the exception rather than the rule (Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985). Although some form of interviewer training is fairly common among optometry programs (67% of responding programs), the training is not rigorous (Spafford, 1995). Most often, it takes the form of interviewers receiving some printed material or meeting with one or more members of the admission staff. Typically, training topics cover: 1) questioning techniques, 2) evaluating candidate responses, and/or 3) listening skills. Only 25% of the optometry programs provide training on interviewer bias.

A review of the literature pertaining to the selection interview reveals a tool fraught with potential threats to its reliability and validity. Despite the dearth of studies concerning the interview's format and structure, and its subsequent predictability, virtually no attention has been given to what interview participants believe should and does happen in a selection interview. The rationale for examining this aspect of a selection interview will be examined next.

Key Concepts Guiding This Thesis

There are numerous, interesting questions to be asked about any admission process, including: 1) What defines a successful applicant? 2) How do admission committee members use selection tools to make their decisions? And, 3) How well do selection measures predict performance? To date, much of the research into the selection interview has focused on its design elements and its predictive value. While of great importance, these kinds of research questions are not the focus of this study of an admission interview.

This thesis will examine a Canadian optometry program's admission interview in terms of the perceptions of the interview as held by the main two sets of participants: the interviewers and the interviewees. The justification for such an endeavor lies in the following arguments.

Firstly, if one accepts Powis' (1994) view of the ideal admission policy, then a selection tool should be employed only after its purpose for inclusion has been established and its presence has been shown to reliably predict those who will demonstrate certain predetermined, desirable, practitioner qualities. For a variety of reasons, few if any professional programs have approached the admission process with such rigor. As a result, there is little reason to expect a strong correlation between selection tools, such as the admission interview, and various outcome measures of the program. It seems premature and ill-conceived, therefore, to study an instrument's predictive value prior to more carefully defining the instrument itself. One danger of bypassing the instrument to study its predictive value is that, in the presence of low validity, the instrument may be deemed a failure even if its users never believed its purpose was to predict the measured quality. In other words, incorrect conclusions may be drawn about the interview's value. As noted earlier, a valid instrument depends not only on its reliability but also on the appropriateness of the constructs measured and the type of criterion measure employed. Herein lies an important aspect of the thesis. Numerous studies have been previously cited that show low correlation between admission interview scores and academic grades in the program. To conclude from these studies that the interview serves no useful function seems flawed if either the purpose of the interview was not to be a predictor of performance or if it is not academic performance that it sought to predict.

Validity studies of admission interviews have often been problematic because comparisons have been made between the interview and subsequent unrelated performance. In Bridle's 1987 study of an occupational therapy program's admission interview, she found no significant correlation between the interview and academic or fieldwork success. Unfortunately, the comparison of interview scores with measures such as academic grades is usually an "apples with oranges" type comparison. That is, interview scores and academic grades likely reflect different domains of skill and knowledge. Despite this, Bridle concluded, "The results also suggest that the personal interview may not be worth the time it takes to administer." (p. 117). An alternate interpretation of the data might have been that the interview failed to satisfy its intended purpose and should be further evaluated to ascertain if it serves any desirable, albeit unintended functions.

The study of purposes and outcomes of an event can be problematic. For example, a statement of purpose may be incomplete or misleading. Alternatively, the stated purpose may overly constrain an observer's perceptions of the outcomes from an event. The potentially dubious nature of intended outcomes has been addressed by a variety of researchers. For example, Michael Scriven would avoid inconsistencies between expectations and experiences by designing evaluations that use a goal-free approach (Scriven, 1967). Goal-free evaluation involves the examination of outcomes without the evaluator being influenced by knowledge of the goals or purposes. Without this knowledge, the focus of the evaluation does not become too restricted thereby preventing the identification of important outcomes (Scriven, 1967; Worthen & Sanders, 1987). Meanwhile, Chris Argyris and Donald Schön would use 'theory in action' to describe the incongruities between one's 'espoused theory' and one's 'theory-in-use' (Argyris & Schön, 1974, Argyris, 1982). An 'espoused theory' refers to the action a person says and believes s/he would take in a specific situation while the 'theory-in-use' corresponds to the factors that actually govern her/his behavior. Alternatively, Robert Merton, a "functionalist" sociologist, would explain incongruities between expectations and experiences in terms of manifest functions, which are objective consequences of the behavior related to its intended purposes, and latent functions, which are unrecognized consequences (Marshall, 1994; Merton, 1965; Spencer, 1996). Interestingly, the debate to explain these incongruities is not restricted to psychologists and sociologists. By attempting to delineate these discrepancies, a better understanding of an admission interview is possible.

Bearing in mind that the premise of this thesis is that an understanding of the selection interview itself is an essential and missing aspect of many admission processes, one must decide what methods to employ in an attempt to articulate the nature of this selection tool. A potentially rich resource for learning about the instrument can be tapped through the experiences of the interview participants. Consequently, this study aims to elucidate the nature of the optometry program's admission interview through the 'eyes' of its participants. Examining participant perceptions will include both interviewers and applicants because one hypothesis of this study is that these two groups will show some differences in opinion. This postulate seems plausible in light of studies of medical residency programs in which applicants and residency directors held different perceptions of what applicant skills and characteristics were sought (Villanueva, Kaye, Abdelhak, & Morahan, 1995; Zagumny & Rudolph, 1992). The similarity, or lack thereof, between participant perceptions and the institutional view of the admission interview is also germane to this study. That is, the program's literature may indicate the admission interview serves certain functions with which participants may believe do not or should not occur.

Another argument for pursuing this study lies in the premise that individuals tend to approach an event with an idealized stereotype in mind against which they gauge their experience. Such comparisons can lead over time, to a re-shaping of a person's concept of the ideal event. That is, a dynamic process exists as experiences are logged and compared against the initial meaning attached to the event. It is not the focus of this study to identify the sources of such meanings and stereotypes but rather to acknowledge their existence is experientially based. Earlier cited work supports the postulate that interviewers make judgments of candidates according to their preconceived stereotypes of the ideal candidate (Bolster & Springbett, 1961; Hakel, Hollman, & Dunnette, 1970; London & Hakel, 1974; Sydiaha, 1961; and Webster, 1964). A postulate of this study is that this type of behavior is not limited to interviewers. Applicants are just as likely to approach their interview with preconceived ideas about what should happen in the interview. The idea of an ideal interview suggests that participants judge their interview experience based on the meaning they have attached to "interviews". Support for this type of rationale can be found from those who follow a sociological approach called symbolic interactionism (Blumer, 1969; Spencer, 1996). This term was coined in 1937 by Herbert Blumer, an American sociologist, who was inspired to a large degree by the earlier work of George Herbert Mead at the University of Chicago. Symbolic interactionism rests upon three basic premises: 1) humans behave in certain ways toward a stimulus based on the

meaning they have attached to it whether the stimulus is an object, a person, a group, a concept or an event, 2) social experience dictates the meanings attached to stimuli, and 3) these meanings change through social interaction. Metta Spencer (1996) illustrates a symbolic interactionist approach by comparing the meaning a person might attach to a particular piece of wood. If the wood had certain specifications, many people might see it as a baseball bat while others, isolated from the sport of baseball and popular media (e.g., perhaps an Australian Aborigine), might see it as a piece of firewood (p. 46). The idea that interview participants interpret their interview experience through the meaning they have attached to interviews provides ample impetus to compare participants' perceptions of the program's admission interview with their perceptions of an ideal interview and an ideal admission process.

The continued, widespread use of the admission interview may defy reason in view of the admission interview's repeated failure to accomplish its frequently stated purpose of predicting applicant success. This failure, coupled with the interview's significant fiscal and human costs, would seem to provide enough impetus for an admission committee to dispense with the interview. When a behavior does not or cannot attain its ostensible purpose, there may be a tendency to attribute its occurrence to sheer ignorance. Tolerance for the behavior significantly wanes. Poorman (1975) suggested that the admission interview has continued to be a selection tool of healthcare admission committees due to tradition rather than to reason. Discussions of the continued presence of the admission interview should consider that: 1) a disparity may exist between the institutional motives and the participants' motives for engaging in the interview process, and/or 2) some of the consequences of interviewing applicants may not have been recognized or acknowledged, yet.

The widespread use of the selection interview could be the result of its actual or perceived ability to fulfill its purpose, that being presumably to predict future success. In the presence of only moderate predictive validity, however, an analysis of perceptions becomes pivotal to understanding the longevity of the selection interview. Regardless of what factors have contributed to the interview's predominance in the selection process, an implicit assumption on the part of its users may have evolved. That is, participants may interpret its widespread use as evidence that it must be valid (Steiner & Gilliland, 1996). In a study of 10 different employment selection tools, university students in the United States and France perceived interviews, resumés and work-sample tests to be the fairest methods for selecting employees (Steiner &

Gilliland, 1996). Several studies suggest there are at least seven factors determining the perceived fairness of selection tools. The four most important determinants of perceived fairness appear to be that: 1) the selection tool has face validity in that it is a logical one for identifying qualified applicants (Smither, Reilly, Millsap, Pearlman & Stoffey, 1993; Steiner & Gilliland, 1996); 2) employers have a right to obtain information using the method (Rynes & Connerley, 1993; Steiner & Gilliland, 1996); 3) the method is appropriate because it is widely used (Steiner & Gilliland, 1996); and 4) the method provides an opportunity for applicants to perform so that important qualities can be detected that will differentiate the applicants (Gilliland, 1994; Steiner & Gilliland, 1996). Although to a lesser degree, the perceived fairness of a selection tool also appears to depend on the perceptions of the selection tool's: 1) basis in scientific research (Steiner & Gilliland, 1996); 2) interpersonal treatment such as warmth and sensitivity (Bies & Moag, 1986; Steiner & Gilliland, 1996); and 3) propriety as in the use of inappropriate, illegal or invasive questions (Bies & Moag, 1986; Kravitz, Stinson, & Chavez, 1994; Steiner & Gilliland, 1996). In this context, a fair selection tool is a just tool in the minds of applicants. In fact, Gilliland (1993) used organizational justice theories to develop a justice-based model of applicants' perceptions of selection systems. It is intriguing that, among all these studies, a selection tool's ability to predict future performance has not been identified as a determinant of perceived fairness.

Summary of Chapter

This chapter has highlighted the paradox of the healthcare profession admission interview. The interview is very prominent in the selection process despite substantive evidence to question its purpose. The case study presented in this thesis is essentially a descriptive one, which falls into the domain of Education. Like the field of Education, this study draws on conceptual contributions from both the fields of Psychology and Sociology. There are five premises upon which this thesis is based: 1) the desire to study the impact of the admission interview has occurred in the presence of insufficient examination of the instrument itself; 2) interview participant perceptions provide an important source of data with which to move towards a better understanding of the admission interview; 3) participant perceptions of their interview experience should be considered relative to their perceptions of the ideal interview; 4) incongruities exist between interview participants' expectations of and experiences with an interview; and 5) participants gauge their interview experience relative to the meanings they have attached to the concept of an interview. The case study of a Canadian optometry program presented in this thesis attempts to describe the interview through

the perceptions of its participants. The opinions of the interviewers and applicants are examined in terms of the interview's purposes(s) and evaluated candidate traits. The participants' experiences with the program's interview are contrasted with their perceptions of an ideal admission interview and selection process as well as with the program's stated interview purposes. This study provides a new approach that will potentially shed some understanding on the longevity of a program's admission interview.

CHAPTER 3: METHODOLOGY

Overview of Chapter

The thesis research problem was addressed by examining the UW School of Optometry's written admission policies and surveying the program's interviewers and interviewed applicants. The final research questionnaire evolved from the following process: 1) reviewing relevant literature; 2) presenting a study proposal to the thesis committee; 3) developing a draft questionnaire; 4) seeking ethical approval for the study; 5) interviewing faculty and optometry students who had experience with the program's admission interview; 6) seeking feedback from the thesis supervisor; 7) piloting the questionnaire; and 8) seeking further feedback from the thesis committee. After the questionnaire was first drafted, it was revised following each subsequent step.

Research Problem

The paradox of the admission interview is that it remains embedded within the selection process of many healthcare professional programs despite its unclear value. This 1996 study of a Canadian optometry program's admission interview sought to begin to explain this paradox by examining the interview's perceived purpose(s) and content from the perspectives of the interviewer and the applicant. These perceptions were compared with their views of an ideal admission interview and selection process as well as with the program's stated interview purposes and content.

Literature Review

An initial literature review was conducted to develop an understanding of the healthcare program admission interview, in terms of its: prevalence and format, purposes and outcomes, as well as strengths and limitations (Spafford, 1993). The review highlighted the contrast between the typical healthcare admission interview and the ideal selection interview as defined in the psychological literature. Later, a more extensive literature review of the fields of industrial and organizational Psychology was pursued in order to more fully describe the causes of the selection interview's well-documented limitations. The sociological literature was also reviewed in order to contribute to the underpinnings of the study. The literature review process began in 1992 during doctoral course work and continued through to 1996.

Initial Questionnaire Development

The initial research questionnaire was developed during the winter of 1995. Both the reviewed literature and the thesis committee's feedback were considered in the drafting of the questionnaire. My experience since 1986 as an Admission Officer for the UW optometry program provided an additional source for generating survey questions. The thesis supervisor, who is experienced in survey design, was consulted regarding both the questionnaire's content and design after the initial version had been drafted. Revisions were made as a result of these meetings.

Ethical Review

Approval of the study was needed from both the Ethical Review Committee (ERC) at the Ontario Institute for Studies in Education (OISE) and the Human Research Ethics Committee (HREC) at the UW Office of Human Research and Animal Care. The OISE documentation was completed and submitted during the spring of 1995. The letters requesting and receiving administrative approval appear in Appendix E. After reviewing the submission, the ERC raised no concerns and approved the study in the early summer of 1995. The required UW ethics documentation for the HREC was submitted in early July 1995. The review comments received from the HREC in late July were not restricted to ethical considerations. In fact, the HREC included methodological issues in its review (e.g., members posed questions about the sample size and the questionnaire wording). The HREC raised no ethical concerns although wording changes were requested to clarify that participants were guaranteed anonymity and were free of coercion on my part. Revisions were made to the draft questionnaire and the letter of information. The HREC approved the study in mid-August 1995.

Research Interviews

Between late August and mid-October 1995, individual interviews were conducted in order to verify the appropriateness of the draft questionnaire items and to identify additional issues for inclusion in the survey. The opinions of both interviewers and interviewees were sought. The number of interviews was limited to six per group for three reasons. First, it was assumed that most relevant themes had already been identified through a combination of the literature search and my experience with the UW optometry admission process, therefore the interviews were providing mainly a quality check of the draft survey. Secondly, it was assumed that 12 interviews would provide a sufficient opportunity to observe repeated

themes emerging in the interviews. Lastly, I was concerned about the time involved in this stage of the survey refinement because conducting and analyzing 12 interviews would involve a lengthy process.

Potential participants received a letter of information that requested their participation, an informed consent form, and a list of questions to be asked by me during the interview (see Appendix F for a copy of the letter). The faculty list contained ten questions and the student list contained twelve questions. An example of a question posed to faculty participants was: "What do you look for in an applicant (i.e., in terms of skills or attributes)?" An example of a question posed to student participants was: "What do you think the interviewers were looking for in the interview?" The letter of information estimated that the interview would last approximately 45 minutes. As shown in Table 3.1, this was a reasonable description of the student interviews but not the faculty interviews which were, in general, longer.

Table 3.1: Group Comparison of Interview Duration

Statistic	Students	Faculty
Mean	45 min.	64 min.
Median	40 min.	60 min.
Range	35 to 75 min.	40 to 85 min.

It was postulated that the opinions held by participants would depend, in part, on their experience with the UW admission process. In the case of interviewers, their perceptions might also depend on the type of role they held in the School. Interviewers occupy either a professorial position or a lecturer position. In general, the former group maintains a heavier scholarship commitment while the latter group maintains a heavier teaching commitment. During the fall and winter academic terms, the assigned teaching time for a professor is approximately 1.5 days per week while it is about 3.5 days per week for a lecturer. During the summer academic term, the typical assigned teaching time for a professor drops down to zero for non-optometrists and less than one day per week for optometrists. In contrast, the lecturer's teaching load remains at about 3.0 to 3.5 days per week. With more of the didactic instruction being carried out by professors and more of the clinical instruction being carried out by lecturers, their respective perceptions of what skill set describes a successful optometry student may differ. These differences may affect their perceptions of what skills should be identified in the optometry applicant pool.

Interviewer participants were selected randomly from both the professorial and lecturer groups. Four professors and two lecturers were approached. Fewer lecturers than professors were approached for the study because the lecturer pool represented only about one-third of the faculty complement and their availability to interview applicants was less because their schedules were less flexible than the professorial ranked faculty. Interestingly, seven professorial ranked faculty were approached in order to obtain informed consent from four while the first two lecturers who were approached agreed to participate. The faculty research interviews were conducted in my office at mutually convenient times between August 23, 1995 and October 12, 1995.

The possibility exists that optometry student perceptions of the admission interview may depend upon whether the student is an internal (i.e., UW) applicant or an external applicant. UW applicants typically represent over one-third of the applicant pool and the opportunity to share information and/or to be affected by rumors from other applicants is much greater than for external applicants. Being a resident of a contract province may also influence the student's perceptions because academic excellence is not a necessity for obtaining an interview (N.B., for a description of a contract province, see Chapter 1: UW School of Optometry Admission Process). The other major difference is that interviewer availability determines the interviewer combination that on-site interviewees encounter while the same two interviewers provide all the off-site contract interviews. Representation was sought from past internal interviewees, external on-site interviewees and off-site interviewees because of the possible influences of rumors or interview criteria. Three students who had been internal applicants and three who had been external applicants were randomly selected. Two of the external students had been interviewed off-site. Seven optometry students were approached to obtain six participants. The student research interviews were conducted in my office at mutually convenient times between September 15, 1995 and October 6, 1995.

During all research interviews, written notes were made. Later that same day, as much detail as possible was added to the notes as they were typed into a computer processing program. Analysis of the faculty and student interview notes occurred later during October and November 1995. Using the edit features of the word processing program, the participants' responses to a particular question were moved into one large grouping. Both shared and unique thematic responses were then identified. The edit features of the

program were then used to organize the responses into the identified themes. For example, several themes were identified in response to the faculty question: "What do you look for in an applicant (i.e., in terms of skills or attributes)?" These themes were: 1) knowledge about optometry, 2) problem solving skills, 3) behavioral skills, 4) motivation, and 5) physical skills.

Seeking Feedback From the Thesis Supervisor

In December 1995, phone and face-to-face meetings were held with the thesis supervisor to discuss the impact of the research interview data. Three main issues had emerged during the research interview analysis. First, the data confirmed the suspicion that there was a diversity of opinions held among participants regarding the purposes and functions of the UW optometry admission interview. For example, participants disagreed about whether the UW interview assessed personality or ethical development, predicted performance, or reduced candidate stress. They also disagreed about whether the UW interview was sexist or racist. Secondly, the data suggested that participants judged the appropriateness of aspects of the UW optometry interview in terms of their perceptions of an ideal selection interview and that there was some variation in perceptions of an ideal interview among participants. For example, participants disagreed about whether an interview should assess social skills or physical skills, promote public relations or predict future performance. Lastly, there were strong indications from the data that candidate personality dynamics were believed to be evaluated formally or informally by the optometry admission interviewer. These three issues were discussed with my thesis supervisor in light of my concern that the draft questionnaire would not clearly address these issues. My conclusion was that the draft questionnaire required significant revision.

The resulting revisions to the research questionnaire differed from earlier versions of the questionnaire in two main ways. First of all, many of the questions were re-phrased to directly establish the participant's perceptions of: 1) the UW optometry admission interview, 2) an ideal optometry admission interview, and 3) an ideal optometry Admission Committee. The second major change to the questionnaire involved adopting the terminology of Lombardi's (1988) Quantitative Communological Organizational Profile System (Quan-Com System). The Quan-Com System provides an analysis formula for establishing selection and performance assessment standards. Over 200 healthcare organizations use the Quan-Com System. It enables the rating of the organization and the candidate or employee in terms of four

categories of personality factors: attitude orientation (e.g., work ethic), people skills (e.g., communication), managerial aptitude (e.g., creativity), and team orientation (e.g., loyalty). Each of the four Quan-Con personality categories are further subdivided into four personality characteristics. Lombardi argues that these personality factors should be analyzed at the level of the organization and the position being considered. The revisions to the research questionnaire were completed by the end of March 1996.

Piloting The Questionnaire

Two faculty and two optometry students who had been research interview participants earlier in the study were sent letters of information that requested they participate in a pilot run of the research questionnaire. Three of the four participants responded to the letter and a date in April 1996 was set for the pilot run. The participants sat in the same room with me for the piloting of the survey. They were instructed to complete the questionnaire and indicate the following types of feedback in writing on the survey itself: 1) indicate the time taken to complete the survey, 2) identify unclear survey items, and 3) indicate typographical or grammatical errors. A group discussion facilitated by me ensued about the strengths and limitations of the survey design. The focus of the feedback requested and received was such that the content of the survey was not discussed because the purpose of the meeting had been to test how "user friendly" the survey was. Minor editorial changes resulted from the piloting process.

Final Approval From the Thesis and Ethics Committees

The questionnaire had been significantly revised since the HREC or ERC had approved the study in the summer of 1995. Feedback of a theoretical nature was also needed from the thesis committee. The revised questionnaire was sent to each committee in April 1996. The HREC was the only group to suggest some changes and they were of a semantic nature. After some negotiation, some minor wording changes were made. Approval of the final questionnaire was obtained.

The 10 sections comprising the final questionnaire were: I) Respondent Information, II) The Purpose(s) of an Ideal Optometry Admission Committee, III) The Purpose(s) of an Ideal Optometry Admission Interview, IV) The Actual Purpose(s) of the UW Optometry Interview, V) Possible Traits Evaluated by an Ideal Admission Committee, VI) Possible Traits Evaluated in an Ideal Admission Interview, VII) Traits Evaluated in the Actual UW Optometry Interview, VIII) Possible Changes to the UW Optometry Interview, IX)

Possible UW Optometry Interview Biases, and X) Respondent Comments (see Appendix G for a copy of the questionnaire). The applicant questionnaire involved 152 items while the faculty questionnaire involved 153 items. The difference in item number occurred in the Respondent Information Section which involved 9 items for applicants and 10 items for faculty. All other sections were identical for the two groups. The vast majority of questionnaire items (146 or 147) employed a 5-point Likert scale design of: A) strongly agree, B) agree, C) neither agree nor disagree, D) disagree, and E) strongly disagree. Five items (four in Section I and one in Section VIII) employed a multiple-choice or fill-in-the-blank design. One item (Section X) asked for respondent comments about the time taken to complete the questionnaire, the wording and appropriateness of the questions and relevant issues omitted by the questionnaire. Respondents were advised that the questionnaire should take about 20 minutes to complete (piloting the questionnaire had supported this estimate). The letter of information advised applicants and faculty that participation was voluntary, anonymous and confidential (see Appendix H for a copy of the letter).

Survey Participants

Two types of participant groups received the survey: 1) UW optometry faculty (N = 23), and 2) UW interviewed optometry applicants (N = 157). The faculty population included all UW School of Optometry faculty (except for me) who were available to interview 1996 optometry applicants. This strategy excluded one faculty member who was on a leave of absence during the study and included one retired faculty member who participated in the interviews. All 1996 UW optometry applicants who were interviewed as part of their application to the optometry program (59% of the total number of 1996 applicants) comprised the applicant group.

Questionnaire Distribution

A questionnaire package was sent to each potential participant. Most of these packages were mailed in late May 1996. The mail-out was delayed to early June for the faculty and some applicants who were not interviewed until early June. The goal was for applicants to receive the package after they had been interviewed but before they were aware of the UW admission decisions. The latter point was seen as relevant because the agenda for participation and the view of the UW interview might change with knowledge of the decision. The vast majority (i.e., at least 90%) of the surveys were returned prior to the admission decisions being made. In view of the uncertainty in timing created by a mail-in survey, it is

difficult to precisely identify the exact number of applicants who knew their decision prior to completing the survey. The mailing package contained 1) the letter of information, 2) the questionnaire, and 3) a self-addressed, pre-stamped OISE envelope. The potential participants were asked to return their survey, either completed or not completed, by June 30, 1996. The rationale for returning surveys regardless of completion was to reduce reminder mail-out costs. To maintain participant anonymity, a UW optometry staff member agreed to produce the participant address labels, post the surveys, monitor returned surveys and post reminder letters. Return envelopes that arrived in my OISE mailbox were given to the UW staff member to process. A number, unique to the potential participant, was written on the lower left-hand corner of each return envelope. The staff member used this number to identify who had returned a survey. I had no access to the list of respondents and non-respondents. The return envelopes were opened by me after the staff member had processed the envelopes. Reminder letters were sent to non-respondents on June 30, 1996 and August 1, 1996. Responses were requested by August 3, 1996 and September 16, 1996, respectively (See Appendix I for a copy of the letters). Rates of return are reported and discussed in Chapter 4.

Data Analyses

Questionnaire

All questionnaire data were entered into Microsoft Excel 5.0 for subsequent analyses. The enumerative data from the survey were tabulated for the interviewers and the applicants. The respondent demographic information is reported in the Results Chapter and the frequency distributions for the survey items are shown in Appendix J. Two analytical approaches were applied to the data. The first was descriptive, the second was statistical.

Section II, III and IV of the questionnaire sought opinions about perceived purpose. Respondents were presented with 11 possible purposes with which to indicate their level of agreement. The 11 survey items were collapsed into categories similar, although not identical, to those described by Edwards, Johnson and Molidor (1990). They postulated five purposes of the selection interview: 1) information gathering, 2) verification of application data, 3) decision making, 4) recruitment, and 5) prediction of future performance. In this study, one additional category of purpose was included: public relations (which Edwards, Johnson and Molidor seemed to combine with recruitment). The six categories of purposes considered in this

study are shown in Table 3.2 along with the eleven paraphrased survey items and the source for their inclusion (the complete wording of the survey items can be found in Appendix G).

Table 3.2: Six theoretical categories of purpose in study

	Purpose Category	Paraphrased Survey Item	References
1.	gather information:	gather information	1-3,5-7
		gather unique information	2-3,5,7
2.	verify application data:	clarify information	3,5-7
3.	decision making:	select candidates	1,3,5-7
4.	predict future success:	predict optometrist (OD) success	1,3,5-8
		predict student success	1,3,5-8
5.	recruit candidates:	recruit potential candidates	3-7
		promote program	3-7
6.	public relations:	provide information to candidates	7-8
		meet faculty	8
		reduce candidates' concerns	8

References For Survey Items:
1. Campion, Pursell, & Brown (1988)
2. Collins, White, Petrie, & Willoughby (1995)
3. Edwards, Johnson, & Molidor (1990)
4. Galazka, Kikano, & Zyzanski (1990)
5. Johnson & Edwards (1991)
6. Myslinski & Jeffrey (1985)
7. Spafford (1995)
8. Research Interview

In Section V, VI, and VII, respondents were presented with 31 possible candidate traits with which to indicate their level of agreement. In categorizing the related traits in this study, I considered the work of Lombardi (1988), and Johnson and Edwards (1991), in addition to an analysis of the UW interview question sheet, the research interviews conducted in this study, and my experience with the UW optometry admission process. The resulting seven categories of candidate trait types, the specific survey items and the source references are shown in Table 3.3. The complete wording of the survey items can be found in Appendix G.

Table 3.3: Six theoretical categories of candidate traits in study

	Trait Category	Paraphrased Survey Item	References
1.	professional attributes	OD duties	7-8
		OD scope of practice	7-8
		OD job demands	7-8
		OD accountability	7-8
		ethical principles	7-8
		moral decision making	7-8
2.	people skills:	communication skills	3-4,6-7
		interpersonal skills	3,6-7
		presence	4
		perceptiveness	4
		energy level	4
		body language	7
3.	attitude orientation:	work ethic	4,7
		aggressiveness	4
		adaptability	4
		perseverance	4
		motivation	3,6-7
4.	managerial aptitude:	independent judgment	4
		planning skills	4
		creativity	4,7
		ability to delegate	4
		problem solving skills	7-8
5.	team orientation:	cooperation	4
		coworker relations	4
		loyalty	4
6.	biases:	fashion	2,7
		beauty	2,7
		visible disability	5,7
		racial identification	1,7
		religious affiliation	1,7
7.	physical skills:	manual dexterity	7

References For Survey Items:
1. Campion, Pursell, & Brown (1988)
2. Dipboye, Arvey, & Terpstra (1977)
3. Johnson & Edwards (1991)
4. Lombardi (1988)
5. Scheuerle, Guilford, & Garcia (1982)
6. Spafford (1995)
7. Research Interviews
8. UW Interview Question Sheet (Appendix K)

Descriptive Analyses

Many of the survey items required the respondent to indicate a level of agreement with a statement by circling one of five letters from strongly agree (A) to strongly disagree (E). The letters were converted to integers when they were entered into the database such that strongly agree (A) was '5', agree (B) was '4', neither agree nor disagree (C) was '3', disagree (D) was '2' and strongly disagree (E) was '1'.

For the purposes of descriptive analysis only, group (i.e., interviewer or applicant) agreement indexes for each suggested purpose and each suggested trait were calculated for the three contexts investigated: the UW interview, the ideal interview and the ideal committee. To enable the calculation of agreement indexes, the 5-choice survey items were converted into integers as follows: strongly disagree (-10), disagree (5), neither agree nor disagree (0), agree (5), and strongly agree (10). By using the formula 5(n-3), where 'n' was the entered '1' to '5' integer value, the data could be converted from the '1' to '5' scale to the '-10' to '10' scale. The conversion was considered desirable for descriptive purposes because it was felt that the converted scale was more 'visually' understandable. That is, readers could relate to positive versus negative values to reflect agreement versus disagreement and a scale of '0' to '10' was easier to interpret. The agreement index for a given survey item was the sum of the products of each agreement value and the frequency for that agreement value, divided by the number of respondents for the item.

The group agreement indexes were categorized into one of three agreement levels as follows: agree (>2.5), neutral (2.5 to -2.5), and disagree (<-2.5). The items with group agreement indexes greater than 2.5 and less than -2.5 were categorized as agree and disagree, respectively, because these indexes represented a value more than half way from 0.0 for neutral towards item responses of 5 for agree and -5 for disagree. The classification of three 'agreement levels' was used to provide a gross indicator of the level of agreement. The frequency distributions of responses were examined for agreement indexes that fell into the 'neutral' category because an index near '0' could be derived from a bi-modal rather than a more normal type distribution. Any frequency distributions, which approached a bi-modal distribution upon visual inspection, were highlighted in Chapter 4 and discussed in Chapter 5.

Consideration was given to establishing how great a difference in the agreement index would constitute a notable difference between groups or between admission contexts. Merely identifying whether a purpose fell, for example, into the "agree" category for one group and the "neutral" category for the other group was considered insufficient because an index difference of only 0.1 could result in the groups being considered notably different (e.g., 2.6 versus 2.5). Instead, a minimum threshold difference in the indexes was required for the difference to be considered notable in this study. This threshold was set at 2.6. The rationale for requiring this amount of difference in the agreement index was that an interval of 2.6 would

be the minimum difference required to shift a neutral mean of 0.0 into either the agree category (>2.5) or the disagree category (<-2.5). A notable index difference (NID) was therefore defined as two indexes that differed by a value of at least 2.6. This could mean that two indexes could fall into the 'agree' range but the difference could be considered notable if they differed by at least 2.6. NIDs represented a shift in agreement level which was worth noting. Group NIDs were identified and described for purposes and traits. NIDs were also noted for comparisons between the ideal interview and the UW interview as well as between the ideal interview and the ideal committee for specified groups.

Statistical Analyses

The large number of dependent variables (i.e., 11 purposes and 31 candidate traits) prevented meaningful comparisons per variable because given enough variables, some statistically significant differences were bound to occur. A method of collapsing the data was necessary prior to performing any group comparisons between the perceptions of the faculty and the applicants. Principal component (PC) analysis was undertaken as the method to collapse the data into a more manageable number of components that are orthogonal (i.e. not correlated) to each other (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975). Principal component analysis differs from most forms of factor analyses because PC analysis does not assume any underlying structure to the data. The method of PC analysis identifies the linear combination of variables that accounts for more variance in the data than any other linear combination of variables. The first principal component is the set of variables that provides the best summary of linear relationships in the data. The second principal component is the second best summary and so on. Each successive principal component accounts for variance not accounted for by the component before it. The total number of principal components, derived by the analysis, accounts for the total variance in the data.

Principal component analysis was undertaken on the combined group data (i.e., interviewers and applicants together). PC analysis was not pursued for the individual groups because the size of the interviewer group (n=20) was too small: as a general rule the number of respondents must exceed the number of dependent variables. Ideally it should exceed the variables by a factor of more than four (E. Harvey, personal communication, June 24, 1997). The n value for the two groups combined was 129. This exceeded the number of purposes by a factor of almost 12. The total number of participants

exceeded the number of traits by a factor of just over 4.0. The combined group data was analyzed by the PC method for the perceptions of the ideal interview only. Although it would have been interesting to examine the principal components in terms of the UW interview and the ideal committee and comment on any differences in components among the three admission contexts, this was not pursued because it is the participants' view of the ideal interview that this study argues is their reference point for their opinions of the UW interview. That is, through social interaction, participants attach meaning to events such as a selection interview. This meaning would represent their interpretation of what an interview should involve or, said in other words, their vision of an ideal interview. Their experiences of a particular interview would be gauged against this ideal.

Once the purpose and candidate trait principal components were identified, group comparisons were made using the independent t-test and comparisons between admission contexts were performed using the paired t-test. Specifically, the principal components were statistically compared between four types of independent groups using the student t-test: 1) applicants versus interviewers, 2) female applicants versus male applicants, 3) internal applicants versus external applicants, and 4) contract applicants versus remaining applicants. The female versus male applicant subgroups were compared because of cited literature on sexism in the selection process. The internal/external applicant subgroups were included in the analysis because unlike most external applicants, who do not know each other, many internal applicants attend the same classes and have some sense of their competition. The different interview experience contract applicants encounter (e.g., off-site with the same interview team) in addition to the myths attached to the existence of the contracts provides a justification for studying their opinions separate from the other applicants. The small number of interviewers precluded comparisons within the group.

Table 3.4 shows the types of within (sub)group statistical comparisons of the principal components made using the paired t-test. These tests were performed to compare differences between the ideal interview and the UW interview as well as to compare differences between the ideal interview and the ideal admission committee. A visual indication of the type of comparison to be made within groups is shown in Figure 3.1.

Table 3.4: Within Group PC Comparisons: Paired Student t-test

(Sub)Groups	Comparisons
Interviewers	Ideal Interview vs. UW interview Ideal Interview vs. Ideal Committee
Applicants	Ideal Interview vs. UW interview Ideal Interview vs. Ideal Committee
Female Applicants	Ideal Interview vs. UW interview Ideal Interview vs. Ideal Committee
Male Applicants	Ideal Interview vs. UW interview Ideal Interview vs. Ideal Committee
Internal Applicants	Ideal Interview vs. UW interview Ideal Interview vs. Ideal Committee
External Applicants	Ideal Interview vs. UW interview Ideal Interview vs. Ideal Committee
Contract Applicants	Ideal Interview vs. UW interview Ideal Interview vs. Ideal Committee
Excluding Contract Applicants	Ideal Interview vs. UW interview Ideal Interview vs. Ideal Committee

Two other sources of information were examined in this thesis. The UW optometry admission literature describing the interview and the admission statistics between 1992 and 1996 were studied to compare and contrast these data with the participants' perceptions.

UW Optometry Admission Interview Policy

The UW Doctor of Optometry Program booklet states the policy regarding the purpose of and the candidate traits to be evaluated in the admission interview (see Chapter 4). This document provided a reference point for comparison of the participant perceptions obtained with the questionnaire (provided in Chapter 5).

Background Admission Statistics

The goal of the thesis was to provide a better understanding of one particular admission variable, the interview, by studying the perceptions of its participants. These perceptions were gleaned at one point of time in the School's history. To address the concern that the 1996 applicants might in some way not be representative of other applicants, admission statistics were examined for the years 1992 to 1996, inclusive. Admission data prior to 1992 were excluded from the study because of significant differences in admission policies (e.g., no OAT score, no Median Score, different Admission Committee structure). The five years of data were entered into Microsoft Excel 5.0 for subsequent analyses. One-way analysis of variance (ANOVA) and chi-squared tests were used to examine yearly differences in several demographic

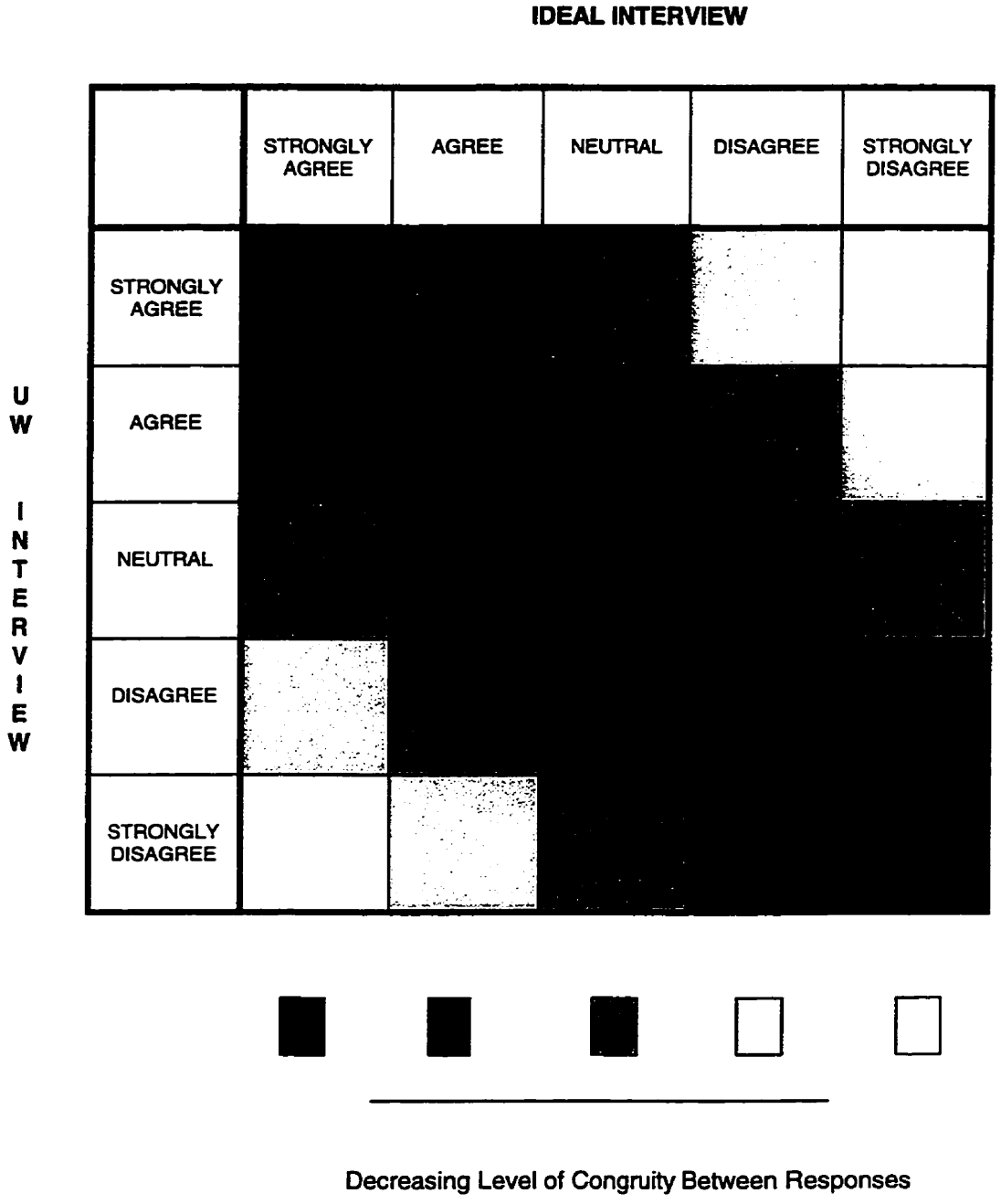
variables, academic background and academic performance. The chi-squared test was used to examine six demographic variables in terms of the yearly number of: 1) female versus male applicants, 2) eligible versus non-eligible applicants, 3) internal versus external applicants, 4) contract versus Ontario versus non-contract applicants, 5) interviewed versus not interviewed applicants, and 6) interviewed on-site versus off-site applicants. The chi-squared test was also used to examine three academic admission variables in terms of the number of applicants with: 1) a BSc degree versus other degrees versus no degree, 2) one versus two versus three versus four versus five or more years of postsecondary education, and 3) zero to eight recommended pre-requisites completed. Finally, the one-way ANOVA was used to compare five yearly admission variable performances: 1) overall mean (OM), 2) OAT score, 3) mean interview score (MIS), 4) interviewer score difference (ISD), and 5) autobiographic sketch (ABS) score. The null hypothesis (H_o) tested for in each case was that no yearly differences existed. My expectation was that there would be few if any differences in these measures among the five years. Admission reports presented to the faculty in the past few years have indicated a consistently high academic caliber of admitted students. These reports coupled with my sense of the applicant pool during this period supports minimal inter-year differences in applicant performance or type being found. Such findings would help provide some indication of how representative the 1996 surveyed applicant pool was of other recent application years. These yearly comparisons are reported in the next chapter and their implications discussed.

Summary of Chapter

This chapter described the development of the research question and the resultant methodology. The required data focused on the perceptions of the participants of one optometry program's admission interview. These data were collected using a questionnaire which was developed after reviewing the relevant literature, interviewing several participants, and considering my extensive experience with the program's admission process as well as the feedback from thesis committee members. Key comparisons of the data will focus on group differences and differences between experiences with the program's interview and perceptions of an ideal interview and admission process.

Figure 3.1: Perception Relationships of the UW Interview and Ideal Interview

Example: Purpose: To predict who will succeed as an optometrist.



CHAPTER 4: RESULTS

Overview of Chapter

This chapter begins by comparing the 1996 applicant pool with the four previous admission years. Statistical comparisons among the five years are presented that test whether the 1996 applicants were typical of recent UW applicants. Next, the optometry program's written statement on the interview's purpose and content is described. This information enables the reader to become familiar with the institutional view of the program's interview and develop expectations with which to contrast the participants' perceptions. The survey is analyzed and presented in two ways; initially in descriptive form and then in statistical form.

Admission Data Analyses

How representative were the 1996 applicants?

The survey included applicants from one admission year only: the 1996 admission year. Indications of how representative these applicants were of other years were needed. Consequently, yearly statistical comparisons of the five admission years between 1992 and 1996 were performed which considered both demographic and performance measures. The p value for statistical significance for each test was set at 0.050.

Yearly Comparisons of Admission Demographics

Six annual admission demographic variables (see Table 4.1) were tested using a chi-squared test: 1) the number of female versus male applicants, 2) the number of academically eligible versus non-eligible applicants, 3) the number of internal versus external applicants, 4) the number of contract residents versus Ontario residents versus non-contract residents, 5) the number of interviewed versus not interviewed applicants, and 6) the number of on-site versus off-site interviews.

Table 4.1: Yearly Admission Demographic Variable Comparisons (Chi-Squared: p=0.050)

Variable	$\chi^2_{(DF)}$ Value	p value
Female vs. Male	$\chi^2_{(4)} = 2.686$	0.612
Eligible vs. Not Eligible	$\chi^2_{(4)} = 5.052$	0.282
Internal vs. External	$\chi^2_{(4)} = 3.034$	0.552
Contract vs. Ontario vs. Non-contract	$\chi^2_{(4)} = 31.622$	**0.000**
Interview vs. No Interview	$\chi^2_{(4)} = 3.517$	0.475
Onsite Interview vs. Off-site Interview	$\chi^2_{(4)} = 6.538$	0.162

The only significant demographic difference across the five years was found in the number of applicants from Ontario, contract provinces and non-contract provinces. Table 4.2 shows that the years where the applicant numbers differed most were 1992 and 1995. In 1992, the proportion of contract applicants was down and the proportion of non-contract applicants was up while in 1995, the opposite shift occurred. Of interest, the 1996 admission year compared well with the five-year proportional means.

Table 4.2: Yearly Proportion of Ontario, Contract & Non-contract Applicants

Year	Ontario	Contract	Non-contract
1992	64.0%	24.6%	11.4%
1993	66.0%	25.5%	08.5%
1994	58.2%	33.6%	08.2%
1995	57.4%	40.2%	02.4%
1996	63.3%	31.4%	05.3%
Yearly Mean	**61.8%**	**31.1%**	**07.1%**

Yearly Comparisons of Academic Background

Three types of yearly comparisons were made of applicant academic background using the chi-squared test: 1) the number with a BSc degree versus other degrees versus no degree, 2) the total number of years of postsecondary education completed, and 3) the number of the eight recommended prerequisites completed (Table 4.3).

Table 4.3: Yearly Comparisons of Academic Background (Chi-Squared: p=0.050)

Variable	$\chi^2_{(DF)}$ Value	p value
BSc vs. Other Degrees vs. No Degree	$\chi^2_{(8)} = 14.169$	0.077
1 vs. 2 vs. 3 vs. 4 vs. 5+ Total Yrs	$\chi^2_{(4)} = 33.257$	**0.007**
No. of 8 Recommended Pre-reqs	$\chi^2_{(4)} = 41.306$	0.125

The significant yearly difference in the number of total years completed is the result of a decrease in the number of applicants who have completed one or two years and an increase in the number of applicants with at least five years completed (see Table 4.4).

Table 4.4: Yearly Proportion of Total Postsecondary Years

Year	1 Yr	2 Yrs	3 Yrs	4 Yrs	5+ Yrs
1992	04.9%	30.7%	26.7%	24.4%	13.3%
1993	05.7%	29.9%	24.2%	20.1%	20.1%
1994	03.1%	29.5%	24.2%	20.3%	22.9%
1995	01.6%	28.0%	29.2%	21.6%	19.6%
1996	02.3%	20.1%	23.6%	26.6%	27.4%
Yearly Mean	**03.5%**	**27.5%**	**25.5%**	**22.7%**	**20.8%**

Yearly Comparisons of Admission Performance Variables

Five admission performance variables were compared using the one-way ANOVA test: 1) the university/college transcript overall average, 2) the OAT score, 3) the Mean Interview Score (MIS), 4) the Interviewer Score Difference (ISD), and 5) the Autobiographic Sketch (ABS). See Table 4.5 for the results.

Table 4.5: Yearly Comparisons of Admission Variables (1-way ANOVA: p=0.050)

Variable	$F_{(DF)}$ Value	p value
Overall Mean (OM)	$F_{(4)} = 2.32$	0.055
OAT Score	$F_{(4)} = 1.83$	0.121
Mean Interview Score (MIS)	$F_{(4)} = 0.59$	0.667
Interviewer Score Difference (ISD)	$F_{(4)} = 1.58$	0.179
Autobiographic Sketch (ABS)	$F_{(4)} = 0.97$	0.425

No significant yearly differences between 1992 and 1996 were found by these academic performance measures.

This group of tests suggests that the 1996 applicants are generally typical of other recent admission years and therefore a reasonable group to study with the survey. One way the class of 1996 may differ from the early 1990s is that, in 1996, more applicants had completed a greater number of postsecondary years of education.

UW Optometry Admission Interview Statement

The only written statement, about the purpose of the UW interview and the candidate traits it seeks to assess, is found in the UW School of Optometry, Doctor of Optometry Program booklet (School of Optometry, 1996). On page 10 of the document it states,

> *Interviews are scheduled between March and June and are conducted at the School of Optometry (or in the home province of candidates living in the four western provinces and in N.B. or P.E.I.). Not all candidates are asked to an interview, although candidates willing to travel at their own expense may submit a request for an interview to the Admissions Office. Interviews provide an opportunity to clarify information submitted in the application and to appraise personal qualifications which may bear on the applicant's success in the practise of optometry.*

Stated and Implied UW Purposes and Traits

The UW optometry document appears to state two purposes and suggest a third: 1) to clarify candidate information, 2) to predict success as an optometrist, and 3) to select candidates (a requirement for the second purpose). No specific candidate traits are listed in the statement; however, it indicates there are personal qualifications that will be assessed and that these qualities may bear on future success in practice. This institutional view of the admission interview will be compared with the participants' perceptions in Chapter 5, the discussion.

Survey: Respondent Demographics

Of the (N=180) surveys sent to potential participants, 71.7% (n=129) were returned completed and these were entered into the database (N.B.: surveys were considered complete when more than 85% of the survey items were answered). In addition to the 129 surveys, two surveys were returned blank, one was returned with only the first 9 items answered and two were returned complete but they arrived so late that data analyses had progressed beyond the deadline for entering the data. The demographic breakdown of the respondents is shown in Table 4.6a/b.

Table 4.6a: Interviewer Respondent Demographics

(Sub)Group	N	n	Response Rate
Total	23	20	87.0%
Female	7	6	85.7%
Male	16	14	87.5%
Professor	15	13	86.7%
Lecturer	8	7	87.5%

Table 4.6b: Applicant Respondent Demographics

(Sub)Group	N	n	Response Rate
Total	157	109	69.4%
Female	86	62	72.1%
Male	71	47	66.2%
Internal	52	38	73.1%
External	105	71	67.6%
Ontario	87	59	67.8%
Contract	67	48	71.6%
Other	3	2	66.7%

N.B. N = number receiving a survey; n = number returning a completed survey.

The response rate of 71.7% was considered quite robust, especially for a mail-in survey. The return rate for each subgroup appeared sufficient so that analysis could be interpreted as representative of the target population. Consequently, for purposes of brevity in subsequent text, interviewer respondents will be referred to as interviewers or faculty while candidate respondents will be referred to as candidates or applicants.

Fifty percent of the interviewers indicated they had sat on the 11-member UW School of Optometry Admission Committee at least once since 1992. The faculty interviewed, on average, about eight to nine optometry candidates per year (mean = 8.6; median = 8; standard deviation 4.4; range 1 to 16). Faculty were asked why they interviewed candidates. The group means for the level of agreement with six suggested reasons (to be referred to as agreement index in future text) are shown in Table 4.7.

Table 4.7: Faculty's reasons for interviewing (n=20)

I interview optometry candidates because:	Index
the administration asks me to help interview.	8.3
I like to pull my weight administratively.	6.8
I consider it my duty to the profession and public.	5.5
interviews are an important part of admissions.	4.5
I consider myself to be a good interviewer.	4.0
helping out entitles me to a voice about admissions.	3.0

The faculty's sense of duty to their job and the profession seemed to be the major determinant of their participation in interviews. Interestingly, the strongest agreement was not with attitudes about the interview but rather with a sense of obligation to the task. As can be seen in Appendix J (Frequency Distribution of Survey Responses), the least degree of consensus among the faculty existed regarding the perceived importance of the interview in the admission process.

Candidates had been interviewed, on average, once (mean 1.3; median 1; standard deviation 0.5; range 1 to 3). Candidates were asked why they believed they had been granted a UW optometry admission interview. The group agreement indexes with six suggested reasons are shown in Table 4.8 (the analysis was the same as in Table 4.7).

Table 4.8: Candidates' beliefs of why they were granted an interview (n=109)

I believe I was granted an interview because of my:	Index
university/college grades.	6.1
autobiographic sketch, essay & references.	5.7
OAT score(s).	5.1
province/territory of residence.	-1.8
unique application (e.g., older applicant, past career).	-4.9

Candidates seemed to believe that both the academic and the non-academic selection variables of the application were considered in the decision to offer an interview. Applicant demographics such as place of residence and uniqueness of the application were not considered factors. The perceptions of why an interview was granted was further analyzed in terms of whether the candidate was or was not from a contract province. This analysis was pursued because the decision to grant an interview is based primarily on university/college grades for all applicants except for contract candidates who are granted an interview primarily based on province of residence. Only when the number of contract candidates

exceeds the number of interview time slots are the university/college grades considered. Table 4.9 compares the perceptions of contract applicants with all other applicants.

Table 4.9: Contract vs. other candidates' beliefs of why they were granted an interview

	Contract (n=48)	Other (n=61)
I believe I was granted an interview because of my:	**Index**	**Index**
university/college grades.	4.6	7.4
OAT score(s)	5.7	5.7
autobiographic sketch, essay & references.	7.1	4.7
province/territory of residence.	-0.6	-2.8
unique application (e.g., older applicant, past career).	-4.0	-5.5

The results suggest that contract candidates do not understand that the primary determinant of them being granted an interview is their province of residence. Contract province interviewees seem to believe that their non-academic performance and to a lesser extent their academic performance influenced the decision to interview them.

Survey: Descriptive Analyses

Perceptions of the Interview's Purpose(s)

The group agreement indexes (range from -10 to +10) for the suggested 11 purposes are shown in Tables 4.10a/b/c. The tables also indicate into which level of agreement (agree, neutral or disagree) each purpose fell. The definitions of agree, neutral and disagree were provided in Chapter 3 (p. 82).

Both interviewers and applicants agreed that the purpose of the UW interview involved gathering information and selecting candidates. Interviewers also agreed that candidates were provided with information during the UW interview; a purpose that was deemed related to public relations. Both interviewers and applicants believed that the UW interview did not help clarify candidate information. The applicants also believed that the UW interview failed to reduce their concerns about the admission process. The respondents were neutral towards the remaining suggested purposes. In summary, the UW interview was perceived as helping to gather candidate information and select candidates while it was perceived as failing to clarify candidate information.

The UW Interview

Table 4.10a: Group agreement level with respect to the UW interview: Purpose(s)

Level	Applicants (A)		Interviewers (I)	
Agree	gather information	6.3	gather information	5.8
	select candidates	4.7	gather unique information	5.5
	gather unique information	4.6	provide information	3.8
			select candidates	2.8
Neutral	meet faculty	2.4	meet faculty	2.0
	provide information	1.7	reduce concerns	0.3
	predict OD success	1.7	promote program	0.3
	predict student success	1.6	predict student success	-0.5
	recruit candidates	-1.6	predict OD success	-1.5
	promote program	-1.9	recruit candidates	*-2.3
Disagree	clarify information	-2.8	clarify information	-5.0
	reduce concerns	-3.0		

- The frequency distribution for this item approaches a bi-modal distribution.

The Ideal Interview

Table 4.10b: Group agreement level with respect to the ideal interview: Purpose(s)

Level	Applicants (A)		Interviewers (I)	
Agree	gather information	7.7	gather information	7.4
	gather unique information	6.6	gather unique information	6.5
	provide information	5.5	select candidates	6.3
	clarify information	5.0	clarify information	4.2
	select candidates	4.9	provide information	3.0
	predict OD success	3.1		
Neutral	meet faculty	2.4	predict student success	2.5
	predict student success	2.0	predict OD success	2.3
	reduce concerns	2.1	reduce concerns	2.0
	promote program	0.8	promote program	*1.3
	recruit candidates	0.1	meet faculty	0.8
			recruit candidates	*-1.3
Disagree				

- The frequency distribution for this item approaches a bi-modal distribution.

Interviewers and candidates both agreed that the ideal interview should help to gather information, clarify information, select candidates and provide information to candidates. Applicants also believed the ideal committee should predict those who will succeed as optometrists. There was a neutral opinion regarding the remaining suggested purposes of an ideal interview. In summary, the perceptions of the ideal

interview were that it should help to gather candidate information, select candidates and clarify candidate data.

The Ideal Admission Committee

Table 4.10c: Group agreement level with respect to the ideal committee: Purpose(s)

Level	Applicants (A)		Interviewers (I)	
Agree	gather information	8.6	select candidates	9.7
	select candidates	8.5	gather information	9.0
	gather unique information	6.8	gather unique information	6.1
	provide information	6.4	clarify information	5.8
	clarify information	5.9	provide information	4.5
	promote program	3.0	reduce concerns	3.5
	meet faculty	2.9	predict student success	3.0
	predict OD success	2.9		
	predict student success	2.8		
	reduce concerns	2.8		
Neutral	recruit candidates	1.4	promote program	2.5
			predict OD success	2.3
			recruit candidates	1.5
			meet faculty	0.3
Disagree				

Candidates agreed that the ideal committee should help to serve 10 of the 11 suggested purposes (they were neutral about recruiting applicants). The interviewers agreed that the ideal committee should serve to gather information, clarify information, and select candidates. Interviewers agreed that two of the three elements of public relations should occur and that the ideal admission committee should try to help predict student success. Interviewer feelings were neutral towards the remaining suggested purposes. In summary, the perceptions of the ideal committee was that it should help to gather candidate information, select candidates, clarify candidate data, as well as provide some aspects of public relations, and predicting success.

Group Comparisons

The 'agree' to 'disagree' ranges were similar for the two groups in the three purpose sections of the questionnaire. Using the criteria for notable index difference (NID) described in Chapter 3, only three notable group differences in perceived purpose were found: two with respect to the UW interview and one with respect to the ideal admission committee. Interviewers were neutral (0.3) while applicants disagreed (-3.0) that the UW interview reduced candidates' concerns about the admission process. While

interviewers and applicants were neutral that the purpose for the UW interview was to predict optometrist success, the applicants were more positive (1.7) than the interviewers (-1.5).

Interviewers were neutral (0.3) while applicants agreed (2.9) that the ideal admission committee should provide an opportunity for candidates to meet faculty. In contrast, there were no group NIDs in the perceptions of the ideal interview's purpose.

Ideal Interview versus UW Interview

The perceptions of the UW interview and the ideal interview were compared for both the applicant group (Table 4.11a) and the interviewer group (Table 4.11b). Four NIDs were found for each group. Each NID signified a purpose that was perceived as less applicable to the UW interview than to the ideal interview. A positive UW-II value indicates agreement was greater for the UW interview than the ideal interview while a negative value indicates the opposite.

Table 4.11a: UW interview versus ideal interview: applicant NIDs

Purpose Theme	Purpose	UW	II	UW-II
Public Relations	provide information	1.7	5.5	-3.8
	reduce concerns	-3.0	2.1	-5.1
Recruitment	promote program	-1.9	0.8	-2.7
Clarification	clarify information	-2.8	5.0	-7.8

The purposes that applicants found less applicable to the UW interview than they would have liked ideally involved public relations, recruitment and clarification. Two of the NIDs involved purposes that applicants believed the ideal interview should have: providing information and clarifying information. The most striking shift in agreement occurred when applicants agreed (5.0) that the ideal interview should help to clarify candidate data but the UW interview did not succeed in this intent (-2.8).

Table 4.11b: UW interview versus ideal interview: interviewer NIDs

Purpose Theme	Purpose	UW	II	UW-II
Selection	select candidates	2.8	6.3	-3.5
Prediction	predict student success	-0.5	2.5	-3.0
	predict OD success	-1.5	2.3	-3.8
Clarification	clarify information	-5.0	4.2	-9.2

The type of purposes that interviewers believed were less applicable to the UW interview than to the ideal interview involved selection, prediction and clarification. Two of the NIDs involved purposes that interviewers agreed the ideal interview should have: selecting candidates and clarifying candidate information. The greatest deficit in the UW interview, according to the interviewers, involved clarifying candidate information. Interviewers agreed the ideal interview should try to clarify candidate data (4.2), however, they believed the UW interview failed to provide this function (-5.0).

Ideal Interview versus Ideal Committee

There were only two notable index differences (NIDs) between the perceptions of the ideal interview and the ideal committee for the interviewers and the applicants. According to both applicants and interviewers, selecting candidates was viewed as one of the most important purposes of the ideal admission committee. Although respondents agreed this was a purpose of the ideal interview, the level of agreement was lower than for the ideal admission committee for both groups. For the interviewers, the agreement level dropped from 9.7 for the ideal committee to 6.3 for the ideal interview [-3.4]. The level of agreement for applicants dropped from 8.5 for the ideal committee to 4.9 for the ideal interview [-3.6].

Perceptions of Candidate Trait(s)

Tables 4.12a/b/c show the group means (possible range from -10 to 10) for 31 suggested candidate traits that might be assessed under three different conditions: 4.12a) the UW interview, 4.12b) the ideal interview, and 4.12c) an ideal admission committee. The tables also indicate into which level of agreement (agree, neutral or disagree) each trait fell.

Table 4.12a: Group agreement level with respect to the UW interview: Traits

Level	Applicants (A)		Interviewers (I)	
Agree	OD accountability	8.1	OD duties	6.3
	motivation	7.9	OD scope of practice	6.3
	OD duties	7.9	OD accountability	6.1
	communication skills	7.7	OD job demands	5.8
	ethical principles	7.6	communication skills	5.5
	OD scope of practice	7.6	motivation	4.5
	OD job demands	7.5	interpersonal skills	3.8
	moral decision making	6.8	ethical principles	2.8
	interpersonal skills	6.3		
	independent judgment	5.2		
	presence	4.7		
	body language	4.4		
	perceptiveness	3.9		
	problem solving skills	3.8		
	energy level	3.7		
	work ethic	2.7		
Neutral	adaptability	2.4	presence	2.0
	perseverance	1.9	moral decision making	1.3
	planning skills	1.6	aggressiveness	1.3
	aggressiveness	1.3	body language	1.3
	cooperation	1.1	problem solving skills	-0.3
	coworker relations	0.6	work ethic	-0.3
	loyalty	-0.3	energy level	-0.3
	creativity	-1.2	independent judgment	-0.8
	ability to delegate	-1.6	adaptability	-1.0
			perceptiveness	-1.3
			perseverance	-1.3
			visible disability	*-2.3
			coworker relations	-2.5
			creativity	-2.5
Disagree	fashion	-2.7	fashion	-2.8
	manual dexterity	-4.7	cooperation	-2.8
	beauty	-4.8	planning skills	-3.2
	visible disability	-5.1	loyalty	-4.0
	racial identification	-6.2	beauty	-4.5
	religious affiliation	-7.3	ability to delegate	-5.5
			manual dexterity	-6.8
			racial identification	-7.3
			religious affiliation	-8.8

* The frequency distribution for this item approaches a bi-modal distribution.

Table 4.12b: Group agreement level with respect to the ideal interview: Traits

Level	Applicants (A)		Interviewers (I)	
Agree	communication skills	9.1	communication skills	9.3
	interpersonal skills	8.4	interpersonal skills	8.0
	motivation	7.9	moral decision making	6.3
	work ethic	7.3	ethical principles	5.8
	moral decision making	7.1	problem solving skills	5.3
	independent judgment	6.9	adaptability	5.0
	perceptiveness	6.4	motivation	4.8
	ethical principles	6.2	cooperation	4.7
	adaptability	6.1	perceptiveness	4.5
	perseverance	6.1	independent judgment	4.5
	OD duties	5.9	coworker relations	4.3
	OD scope of practice	5.8	work ethic	3.8
	cooperation	5.6	aggressiveness	3.8
	problem solving skills	5.5	presence	3.5
	energy level	5.4	OD job demands	3.5
	OD job demands	5.3	OD accountability	3.4
	presence	4.9	OD duties	3.3
	planning skills	4.8	OD scope of practice	3.0
	coworker relations	4.7	perseverance	2.8
	OD accountability	4.5		
	body language	4.1		
	aggressiveness	3.5		
	loyalty	3.0		
Neutral	creativity	2.0	planning skills	2.5
	ability to delegate	1.8	creativity	2.5
	manual dexterity	-0.8	energy level	2.3
			body language	2.0
			manual dexterity	0.8
			loyalty	0.3
Disagree	fashion	-4.0	ability to delegate	-2.8
	visible disability	-7.1	fashion	-4.0
	beauty	-7.8	visible disability	-5.5
	religious affiliation	-8.7	beauty	-7.5
	racial identification	-8.8	religious affiliation	-9.3
			racial identification	-9.3

The Ideal Admission Committee

Table 4.12c: Group agreement level with respect to the ideal committee: Traits

Level	Applicants (A)		Interviewers (I)	
Agree	communication skills	8.3	communication skills	8.5
	work ethic	8.2	interpersonal skills	7.3
	interpersonal skills	8.1	problem solving skills	7.3
	motivation	8.1	ethical principles	6.8
	moral decision making	7.4	moral decision making	6.8
	problem solving skills	7.0	motivation	6.0
	perseverance	6.8	independent judgment	5.0
	independent judgment	6.6	OD duties	4.5
	ethical principles	6.6	cooperation	4.5
	OD duties	6.4	coworker relations	4.3
	adaptability	6.1	perceptiveness	4.3
	cooperation	6.0	work ethic	4.0
	OD scope of practice	5.8	aggressiveness	4.0
	coworker relations	5.7	OD scope of practice	3.8
	perceptiveness	5.5	OD job demands	3.5
	OD job demands	5.5	perseverance	3.5
	planning skills	5.3	energy level	3.3
	energy level	4.8	planning skills	3.0
	OD accountability	4.4	OD accountability	3.0
	loyalty	4.1	adaptability	3.0
	presence	3.9		
	aggressiveness	3.1		
	creativity	2.9		
	ability to delegate	2.7		
Neutral	body language	1.7	presence	1.8
	manual dexterity	0.0	manual dexterity	1.8
			loyalty	0.8
			creativity	0.5
			body language	0.0
			ability to delegate	-2.3
Disagree	fashion	-4.2	fashion	-4.5
	visible disability	-6.4	visible disability	-5.5
	beauty	-7.4	beauty	-7.8
	religious affiliation	-8.5	religious affiliation	-9.3
	racial identification	-8.6	racial identification	-9.5

The interviewers agreed that the UW interview assessed eight traits (five of the six 'professional' traits, two 'people skills' traits and one 'attitude orientation' trait). The applicants agreed that these traits were evaluated and, in addition, they believed eight other traits were evaluated. The 'professional' traits and the 'people skills' traits accounted for 12 of the 16 traits that the applicants identified. Interviewers were either neutral about or they disagreed with more candidate traits being assessed by the UW interview than the applicants. Applicants disagreed that the UW interview evaluated either manual dexterity or all five of the

'bias' traits. The types of traits that interviewers believed were not evaluated by the UW interview fell into the same two categories as the applicants but in addition there were 'team orientation' and 'managerial aptitude' traits identified. In summary, applicants seemed to believe that the UW interview assessed twice as many traits as did the interviewers although both groups agreed that 'people skills' and 'professional' type traits were the focus of the assessment.

Applicants had more expectations of an ideal interview than the interviewers. Interviewers agreed that the ideal interview should help assess 19 traits while the applicants identified these traits plus four more. Most of the traits identified by the two groups fell into the 'professional', 'attitude orientation', 'people skills', and 'team orientation' categories. The applicants tended to agree with the evaluation of more 'people skills', 'team orientation' and 'managerial aptitude' traits than the interviewers. Interestingly, both groups showed strongest agreement with communication skills and interpersonal skills being evaluated by the ideal interview. Both groups indicated that 'bias' type traits should not be assessed. The applicant group was rarely neutral when it came to assessing traits with the ideal interview: it seemed, according to applicants, that traits either should or should not be evaluated. In fact, applicants were neutral about only three traits, two of which were 'management aptitude' type traits. Interviewers were neutral on seven traits, three of which were of the 'management aptitude' type. In summary, according two both groups, the ideal interview should evaluate 'professional', 'attitude orientation', 'people skills', and 'team orientation' type traits with applicants expecting more traits to be assessed than the interviewers.

Expectations were high of the ideal admission committee in terms of the number of candidate traits that should be evaluated: applicants agreed with assessing 24 traits and interviewers agreed with assessing 20 traits. The traits identified only by applicants were: presence, loyalty, creativity and ability to delegate. Again, both groups agreed that none of the five 'bias' type traits should be assessed by an ideal admission committee.

Group Comparisons

The 'agree' to 'disagree' ranges were similar for the two groups. Eighteen group NIDs were identified. Table 4.13a shows the NIDs for the UW interview between the applicants (A) and the interviewers (I). Table 4.13b represents group NIDs for the ideal interview and Table 4.13c represents similar type

comparisons for the ideal admission committee. A positive A-I value indicates agreement was greater for applicants than interviewers while a negative value indicates the opposite. Only one of the 18 NIDs was negative.

Table 4.13a: Notable group differences in the perceptions of the UW interview

Candidate Trait Type	Candidate Trait	A	I	A-I
attitude orientation:	motivation	7.9	4.5	3.4
	work ethic	2.7	-0.3	3.0
	adaptability	2.4	-1.0	3.4
	perseverance	1.9	-1.3	3.2
professional:	ethical principles	7.6	2.8	4.8
	moral decision making	6.8	1.3	5.5
people skills:	presence	4.7	2.0	2.7
	body language	4.4	1.3	3.1
	perceptiveness	3.9	-1.3	5.2
	energy level	3.7	-0.3	4.0
managerial aptitude:	independent judgment	5.2	-0.8	6.0
	problem solving	3.8	-0.3	4.1
	planning skills	1.6	-3.2	4.8
	ability to delegate	-1.6	-5.5	3.9
team orientation:	cooperation	1.1	-2.8	3.9
	coworker relations	0.6	-2.5	3.1
	loyalty	-0.3	-4.0	3.7
bias:	visible disability	-5.1	*-2.3	-2.8

- The frequency distribution for this item approaches a bi-modal distribution.

The greatest disagreement between the interviewers and the applicants appeared to occur in the assessment of 'attitude orientation' (four of five were NIDs), 'managerial aptitude' (four of five were NIDs), 'people skills' (four of six were NIDs) and 'team orientation' (three of three were NIDs). The least disagreement occurred for the 'bias' (one of five was NID), and 'professional' (two of six was NID) type traits. In summary, applicants were more optimistic about what the UW interview could assess about the candidate. Applicants more than interviewers believed the UW interview assessed the candidate's 'attitude orientation', 'managerial aptitude', 'people skills' and 'team orientation'.

Table 4.13b: Notable group differences in the perceptions of the ideal interview

Candidate Trait Type	Candidate Trait	A	I	A-I
attitude orientation:	motivation	7.9	4.8	3.1
	work ethic	7.3	3.8	3.5
	perseverance	6.1	2.8	3.3
professional:	OD duties:	5.9	3.3	2.6
	OD scope of practice	5.8	3.0	2.8
people skills:	energy level	5.4	2.3	3.1
team orientation:	loyalty	3.0	0.3	2.7
managerial aptitude:	ability to delegate	1.8	-2.8	4.6

Eight notable group differences were evident. Five NID traits were ones with which both applicants and interviewers 'agreed' the ideal interview should assess. These traits involved either the 'attitude orientation' or 'professional' themes. Two of the NID traits were ones with which applicants 'agreed' while interviewers were 'neutral' (energy level and loyalty). Applicants were 'neutral' about whether the ideal interview should assess the candidate's ability to delegate (1.8) while interviewers 'disagreed' (-2.8).

Table 4.13c: Notable group differences in the perceptions of the ideal committee

Candidate Trait Type	Candidate Trait	A	I	A-I
attitude orientation:	work ethic	8.2	4.0	4.2
	perseverance	6.8	3.5	3.3
	adaptability	6.1	3.0	3.1
team orientation:	loyalty	4.1	0.8	3.3
managerial aptitude:	ability to delegate	2.7	-2.3	5.0

There were five group NIDs with respect to the ideal committee. Three NID traits, which all pertained to 'attitude orientation' were ones with which applicants and interviewers 'agreed'. Applicants indicated that loyalty (4.1) and ability to delegate (2.7) should be assessed by the ideal committee while interviewers were neutral (0.8 and -2.3, respectively).

In summary, the greatest number of group differences occurred with the perceptions of the UW interview with the candidates believing more traits were assessed than the interviewers. Applicants more than interviewers believed the UW interview assessed the candidate's 'attitude orientation', 'managerial aptitude', 'people skills' and 'team orientation'. There were few differences in group perception of the traits that should be evaluated by the ideal interview or the ideal admission committee but the most frequently noted NID theme was 'attitude orientation'.

Ideal Interview versus UW Interview

The applicants' perceptions of the UW interview and the ideal interview were compared using the NID criteria. Thirteen NIDs were found and they are shown below in Table 4.14a. A positive UW-II value indicates the UW interview exceeded the ideal interview in the assessment of a trait while a negative value indicates the opposite.

Table 4.14a: UW interview versus ideal interview: applicant NIDs

Candidate Trait Type	Candidate Trait	UW	II	UW-II
professional:	OD accountability	8.1	4.5	3.6
attitude orientation:	work ethic	2.7	7.3	-4.6
	adaptability	2.4	6.1	-3.7
	perseverance	1.9	6.1	-4.2
managerial aptitude:	planning skills	1.6	4.8	-3.2
	creativity	-1.2	2.0	-3.2
	ability to delegate	-1.6	1.8	-3.4
team orientation:	cooperation	1.1	5.6	-4.5
	coworker relations	0.6	4.7	-4.1
	loyalty	-0.3	3.0	-3.3
physical skill:	manual dexterity	-4.7	-0.8	-3.9
bias:	beauty	-4.8	-7.8	3.0
	racial identification	-6.2	-8.8	2.6

All the NIDs were UW deficits (i.e., the UW interview under-emphasized the assessment of the trait) except for one 'professional' trait (OD accountability) and two 'bias' traits (beauty and racial identification) which were traits considered to be over-emphasized by the UW interview. Seven of the thirteen traits were ones that applicants agreed the ideal interview should assess yet were believed to be assessed less by the UW interview. Nine of the thirteen NID traits were ones classed as 'attitude orientation' 'managerial aptitude', or 'team orientation'.

According to the interviewers, the UW interview generally fell short of the ideal interview except in the area of assessing several 'professional' traits and assessing some of the 'bias' traits, where it exceeded the ideal. Using the NID criteria, 23 notable differences were found. The notable differences in interview opinion of the UW interview (UW) and the ideal interview (II) are listed in Table 4.14b.

Table 4.14b: UW interview versus ideal interview: interviewer NIDs

Candidate Trait Type	Candidate Trait	UW	II	UW-II
professional:	OD duties	6.3	3.3	3.0
	OD scope of practice	6.3	3.0	3.3
	OD accountability	6.1	3.4	2.7
	ethical principles	2.8	5.8	-3.0
	moral decision making	1.3	6.3	-5.0
people skills:	communication skills	5.5	9.3	-3.8
	interpersonal skills	3.8	8.0	-4.2
	energy level	-0.3	2.3	-2.6
	perceptiveness	-1.3	4.5	-5.8
attitude orientation:	work ethic	-0.3	3.8	-4.1
	adaptability	-1.0	5.0	-6.0
	perseverance	-1.3	2.8	-4.1
managerial aptitude:	problem solving skills	-0.3	5.3	-5.6
	independent judgment	-0.8	4.5	-5.3
	creativity	-2.5	2.5	-5.0
	planning skills	-3.2	2.5	-5.7
	ability to delegate	-5.5	-2.8	-2.7
team orientation:	cooperation	-2.8	4.7	-7.5
	coworker relations	-2.5	4.3	-6.8
	loyalty	-4.0	0.3	-4.3
bias:	visible disability	-2.3	-5.5	3.2
	beauty:	-4.5	-7.5	3.0
physical skill:	manual dexterity	-6.8	0.8	-7.6

The disparities between the UW interview and the ideal interview were numerous and widespread in the minds of the interviewers. Five candidate trait themes were strongly represented in that 20 of the 23 disparities fell into one of the themes: 'professional', 'people skills', 'managerial aptitude', 'team orientation', or 'attitude orientation'. The UW interview was viewed as deficient relative to the ideal interview in all cases but three 'professional' traits that pertained to knowledge of the optometric profession and two 'bias' traits (visible disability and beauty). Fifteen of the UW deficit traits were ones that the interviewers had agreed the ideal interview should assess.

Ideal Interview versus Ideal Committee

Generally, the perceptions of the ideal interview and the ideal committee were similar. In fact, no NIDs in perceptions of traits between the ideal interview and the ideal committee were noted for either the interviewers or the applicants.

Possible Changes to the UW Optometry Interview

Respondents were asked if they believed the UW Optometry Admission Committee should consider either: 1) leaving the interview unchanged, 2) subtly revising the interview, 3) significantly revising the interview, or 4) eliminating the interview. In general, interviewers more than applicants believed significant revisions should be made to the UW interview. Table 4.15 shows the frequencies of the respondents' views. Of note, there were three faculty and 11 applicants who did not answer this question.

Table 4.15: Respondents' Beliefs About What Should Happen With The UW Interview

The UW Optometry Admission Committee should consider:				
	Applicants (n=98)		Interviewers (n=17)	
	Freq.	%	Freq.	%
leaving the interview unchanged.	24	24.5%	1	05.9%
subtly revising the interview.	62	63.3%	5	29.4%
significantly revising the interview.	11	11.2%	10	58.8%
eliminating the interview.	1	01.0%	1	05.9%

Of the 115 respondents who answered this survey item, only two (1.7%) wanted to eliminate the UW interview. More interviewers wanted the UW interview to be changed than applicants, almost a quarter of whom wanted to leave the UW interview unchanged. The majority of interviewers (58.8%) wanted the UW interview revised significantly while the majority of applicants (63.3%) wanted the UW interview to be revised only subtly.

For those respondents who indicated they would like to see the UW interview revised, various aspects of the interview that could be changed were suggested. The respondents were asked to indicate their level of agreement with these elements of the interview. Table 4.16 shows the group agreement means for these elements.

Table 4.16: Possible Changes to the UW Interview

Level	Applicants (A)		Interviewers (I)	
Agree	amount applicants know	3.6	interviewer training	7.8
	interview content	2.9	interview content	6.9
			interview's importance	4.4
			style of questions	3.9
Neutral	interview's importance	1.3	who interviews	1.9
	candidate stress	0.5	amount applicants know	1.2
	style of questions	0.1	candidate stress	0.3
	interviewer training	-0.3	time for applicant question	0.0
	time for applicant question	-1.0	interview length	-1.7
	who interviews	-2.3		
Disagree	interview length	-2.9	number of interviewers	-3.5
	number of interviewers	-4.0		

Interviewers wanted to see more changes to the UW interview than the applicants (i.e., 4 versus 2). Interviewers and applicants who wished to see the interview change, believed the interview content (i.e., the topics covered) needed changing. Candidates also indicated they would like to see a change in the amount of information they know about the interview. Aspects of the UW interview that interviewers would like to change were interviewer training, the style of interview questions (e.g. closed versus open-ended), and the importance of the interview in admission decisions. Respondents were not asked how they would like these elements to change. Both groups indicated the number of interviewers (currently two per interview) should not change. Applicants also indicated the length of the interview should not be revised.

There were five group NIDs from considering possible changes to the UW interview: they are shown in Table 4.17.

Table 4.17: Notable group differences in the perceptions of changes to the UW interview

Candidate Trait Type	Candidate Trait	A	I	A-I
interview format	question style	0.1	3.9	-3.8
	interview importance	1.3	4.4	-3.1
interviewer effect	topics covered	2.9	6.9	-4.0
	interviewer training	-0.3	7.8	-8.1
	who interviews	-2.3	1.9	-4.2

Interviewers were much stronger than applicants in their agreement about changing aspects of the UW interview. The NIDs represented differing opinions on issues pertaining to the interview format and aspects of the interviewers themselves. The greatest difference pertained to the perceived need for interviewer training that was strongly supported by the interviewers only.

Possible UW Interview Biases

Respondents were asked to indicate their level of agreement with the existence of possible biases in the UW interview by considering both their experience(s) and what they may have heard others say about their experiences with the UW interview. The respondents' perceptions are summarized in Table 4.18.

Table 4.18: Possible UW optometry interview biases

Level	Applicants (A)		Interviewers (I)	
Neutral			ageism	-0.6
			beautyism	-1.1
			sexism	*-1.9
Disagree	beautyism	-5.9	racism	-4.7
	ageism	-6.0	homophobia	-5.0
	sexism	-6.7		
	racism	-6.8		
	homophobia	-7.0		

- The frequency distribution for this item approaches a bi-modal distribution.

Neither group agreed that the five biases were present in the UW interview, however, interviewers appeared more neutral about their presence than applicants. There were three group NIDs: applicants disagreed while interviewers were neutral that incidents of beautyism [4.8], ageism [5.4] and sexism [4.8] occurred in the UW interview.

As the frequency distribution of interviewer responses to the sexism survey item was approaching bi-modal and the sex of the interviewers was known from the survey, a sex breakdown in responses was examined. The number of respondents who indicated a level of agreement was compared with the number who indicated a level of disagreement for each sex. These numbers were converted to percentages of the sex group. Two thirds of the female interviewers believed the UW interview was sexist (the other third disagreed) while only 14% of the male interviewers believed this to be the case. In fact, 57% of the male interviewers believed the UW interview was not sexist. The proportional differences suggest the female interviewers experience the UW interview as sexist more than male interviewers. Having said this, the small number of interviewer respondents (i.e., 20) may temper the strength of this result without further study.

Highlights of Descriptive Analyses

The following statements are suggested by the descriptive analyses of the survey.

1. Faculty interviewed candidates out of a sense of duty.
2. Applicants were aware that their grades factor into the decision to grant them an interview, however, they did not realize the importance of contract applicants' residential status in this decision.
3. Agreement was strongest with the perceived purpose of the UW interview being to gather information and select candidates.
4. Agreement was strongest with the perceived purpose of ideal interview being to gather information, select candidates, clarify candidate information and provide information to the candidate.
5. Potential deficits of the UW interview were its failure to clarify candidate information and, according to applicants, its inability to provide them with information and reduce their concerns.
6. The written UW optometry policy regarding the admission interview may be perceived as inaccurate regarding its stated objectives to clarify candidate information and to predict future candidate success in view of the participants' perceptions of the UW interview.
7. Agreement was strongest with the UW interview assessing 'professional' and some aspects of 'people skills' type candidate traits.
8. Agreement was strongest with the ideal interview assessing 'people skills', professional', attitude orientation', and team orientation'.
9. Applicants and interviewers perceived numerous differences in the candidate traits assessed by the UW interview (applicants believe the UW interview assesses more traits). The group differences tended to fall into three trait categories: managerial aptitude, people skills and team orientation.
10. Interviewers and applicants were largely in agreement with respect to what traits should be assessed by the ideal interview and the ideal admission committee.
11. The UW interview was perceived to fall short of the ideal interview in its ability to assess candidate traits, which tended to be of the 'attitude orientation', 'team orientation', and according to interviewers, 'managerial aptitude' type.
12. According to the interviewers, the UW interview assessed candidates' visible disabilities more than it should, ideally.
13. Interviewers were not as confident as the applicants that the UW interview was bias free in terms of beautyism, ageism and sexism.

14. Both groups favored changing the UW interview; however the degree of change wanted was greater on the part of the interviewers than the applicants.
15. The changes in the UW interview wanted by interviewers involved the style of interview questions, the level of interviewer training, and the importance of the interview in admission decisions.
16. Female interviewers were more likely to perceive the UW interview as sexist than the male interviewers.

Survey: Statistical Analyses

Perceptions of Purpose(s)

Principal component analysis was applied to respondent perceptions of the ideal interview's purposes. This procedure revealed five independent purpose components that accounted for all the variance in the data. These factors are shown in Table 4.19, with component 1 accounting for the greatest variance and subsequent components accounting for decreasing amounts of variance in the data.

Table 4.19: Principal Component Analysis of The Ideal Interview's Purpose

Comp.	% Total Variance	Individual Purposes	Main Component Theme
PC 1	27.4%	provide information	Public Relations
		meet faculty	
		reduce candidate concerns	
PC 2	24.3%	select candidates	Decision Making & Predict Future Success
		predict OD success	
		predict student success	
PC 3	17.6%	promote program	Recruit Candidates
		recruit candidates	
PC 4	17.0%	gather information	Gather Information
		gather unique information	
PC 5	13.7%	clarify information	Verify Application Data

The theoretical categories indicated in the preceding table shows the same break-down of interview purpose categories proposed in Chapter 3 except that the principal component analysis combined the decision-making and prediction factors that were separate in the proposed theory. The five components were used as the bases with which to compare participant groups perceptions of the UW interview, the ideal interview and the ideal committee data. The first three factors account for approximately 70% (i.e., 69.4%) of the total variance in the data and should be considered the most important factors to examine.

Group Comparisons: The UW Interview

The independent t-test was used to make several group comparisons of the perceived purposes. Initially, the applicants' perceptions of the UW interview were compared with those of the interviewers. The applicant group was then subdivided in order to provide comparisons of three types of subgroups: 1) female versus male applicants, 2) internal versus male applicants, and 3) contract versus other applicants. The small number of interviewers (19) precluded further analysis within that group. The results of the four group comparisons are summarized in Appendix L. The only significant group differences found are highlighted in Table 4.20 below (bolded p values highlight the statistically significant differences).

Table 4.20: Perceptions of UW Interview: Significant Group Differences Independent t-test (p=0.050)

Principal Component	Groups Compared	UW Interview	
		$t_{(DF)}$ value	p value
PC 1: Public Relations	Applicants vs. Interviewers	$t_{(124)} = -1.981$	**0.050**
	Contract vs. Other Applicants	$t_{(104)} = 2.791$	**0.006**
PC 2: Select & Predict	Applicants vs. Interviewers	$t_{(124)} = 2.457$	**0.015**
PC 5: Clarify Information	Applicants vs. Interviewers	$t_{(124)} = 2.258$	**0.026**

Applicants perceived the UW interview's purpose was less about public relations (PC 1) and more about selection and prediction (PC 2) and clarifying information (PC 5) than did the interviewers. The group difference in opinion regarding public relations likely originated out of the perceptions of the UW interview's ability to reduce applicants concerns (see Table 4.10a in the Descriptive Section of this chapter). The applicant group's perceptions leaned toward disagreement (-3.0) while the interviewers were more neutral (0.3). Although the applicant and interviewer group opinions regarding selection and prediction had both been agree to neutral, the applicants' opinions were skewed more positively. Both groups had agreed that the UW interview did not clarify applicant information; however, the opinion was stronger among the interviewers. Of 12 tests of applicant homogeneity, only one statistically significant subgroup difference was found. The contract applicants appeared to be more positive about the purpose of the UW interview being related to public relations than did the remaining applicants.

Group Comparisons: The Ideal Interview

The same four types of group comparisons performed for perceptions of the UW interview were performed for the ideal interview, the results of which can be found in Appendix L. Only two significant group differences were found and they are highlighted in Table 4.21 below (bolded p values highlight the statistically significant differences).

Table 4.21: Perceptions of Ideal Interview: Significant Group Differences Independent t-test (p=0.050)

Principal Component	Groups Compared	Ideal Interview	
		$t_{(DF)}$ value	p value
PC 3: Recruit Candidates	Contract vs. Other Applicants	$t_{(105)} = -1.979$	**0.050**
PC 4: Gather Information	Internal vs. External Applicants	$t_{(105)} = 2.069$	**0.041**

There were no statistically significant differences between the applicants' and the interviewers' perceptions of the ideal interview. There were two significant differences within the applicant group. The applicant group overall had been somewhat neutral about whether the ideal interview's purpose should be to recruit candidates (PC 3); however, the contract applicants were relatively less in agreement with this as a purpose than other applicants. The overall applicant group had shown fairly strong agreement that the ideal interview should gather information (PC 4), including unique information; however, the level of agreement was higher for internal applicants than external applicants.

Group Comparisons: The Ideal Admission Committee

The four types of group comparisons were performed one final time with the perceptions of the ideal admission committee's purpose(s). The results can be found in Appendix L. Only two significant group differences were found and they are highlighted in Table 4.22 below (bolded p values highlight the statistically significant differences).

Table 4.22: Perceptions of Ideal Admission Committee: Significant Group Differences Independent t-test (p=0.050)

Principal Component	Groups Compared	Ideal Committee	
		$t_{(DF)}$ value	p value
PC 2: Select & Predict	Internal vs. External Applicants	$t_{(97)} = 2.057$	**0.042**
PC 3: Recruit Candidates	Contract vs. Other Applicants	$t_{(101)} = -2.045$	**0.043**

There were no statistically significant group differences between interviewers and applicants in terms of their perceptions of the ideal admission committee's purposes. There were two significant differences within the applicant group. Applicants overall had agreed that a purpose of the ideal admission committee involved selection and prediction (PC 2); however, the level of agreement was lower for the external applicants than the internal applicants. Although the overall applicant group was more neutral about whether recruiting candidates (PC 3) should be a purpose, the contract applicants were the least supportive of this as a purpose.

Summary of Significant Group Differences

The statistically significant differences in perceptions between applicants and interviewers all pertained to their experience of the UW interview and not to their perceptions of the ideal interview or the ideal admission committee. Three of the UW interview's five purposes were perceived differently between applicants and interviewers. In 45 independent t-tests of applicant subgroups, only five statistically significant differences were found. This suggests that the applicant group was fairly homogeneous in its perceptions of purpose.

Ideal Interview versus UW Interview

Paired t-tests were performed to compare the differences in perceived purposes between the ideal interview and the UW interview. These data are presented in Tables 4.23a-d (bolded p values highlight the statistically significant differences).

Table 4.23a: Ideal Interview vs. UW Interview Purposes: Applicants & Interviewers Paired t-test (p=0.050)

Principal Component	Applicants		Interviewers	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1: Public Relations	$t_{(105)} = 4.930$	**0.000**	$t_{(19)} = -0.874$	0.394
PC 2: Select & Predict	$t_{(105)} = 0.056$	0.956	$t_{(19)} = 2.384$	**0.028**
PC 3: Recruit Candidates	$t_{(105)} = 2.771$	**0.007**	$t_{(19)} = 1.323$	0.203
PC 4: Gather Information	$t_{(105)} = 4.791$	**0.000**	$t_{(19)} = 1.448$	0.165
PC 5: Clarify Information	$t_{(105)} = 7.517$	**0.000**	$t_{(19)} = 5.047$	**0.000**

Where there were statistically significant differences, the UW interview was perceived as falling short of the ideal interview. Four of the five purpose components were perceived by applicants to be deficient in the UW interview relative to their perceptions of the ideal interview: public relations (PC 1), recruitment (PC 3), gathering information (PC 4), and clarifying information (PC 5). The only component which was not significantly different was selection and prediction of success (PC 2). In contrast, there were two significant differences between the interviewers' perceptions of the ideal interview and the UW interview: the purpose of the UW interview was perceived as significantly less about selecting and predicting success (PC 2) or clarifying application data (PC 5) than it should be ideally. On this latter point, the two groups seemed to agree. The applicants seemed to perceive the UW interview fell short of the ideal interview more than did the interviewers.

Table 4.23b: Ideal Interview vs. UW Interview Purposes: Female & Male Applicants Paired t-test (p=0.050)

Principal Component	Female Applicants		Male Applicants	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1: Public Relations	$t_{(61)} = 4.290$	**0.000**	$t_{(44)} = 2.637$	**0.012**
PC 2: Select & Predict	$t_{(61)} = -0.358$	0.722	$t_{(44)} = 0.549$	0.586
PC 3: Recruit Candidates	$t_{(61)} = 2.581$	**0.012**	$t_{(44)} = 1.388$	0.172
PC 4: Gather Information	$t_{(61)} = 4.609$	**0.000**	$t_{(44)} = 2.222$	**0.032**
PC 5: Clarify Information	$t_{(61)} = 6.052$	**0.000**	$t_{(44)} = 4.452$	**0.000**

Again, the significant differences represented instances where the UW interview was perceived as lacking compared with the ideal interview. Female applicants perceived four significant differences in the perceived purposes between the UW interview and the ideal interview: public relations (PC 1), recruiting (PC 3), gathering information (PC 4) and clarifying information (PC 5). Male applicants perceived similar deficits in the UW interview with one exception: they did not view the UW interview as significantly less geared toward recruiting applicants than the ideal interview should be. The female applicants might have

been more disillusioned with the UW interview than the male applicants as indicated by the number of statistically significant differences.

Table 4.23c: Ideal Interview vs. UW Interview Purposes: Internals & External Applicants Paired t-test (p=0.050)

Principal Component	Internal Applicants		External Applicants	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1: Public Relations	$t_{(36)} = 2.858$	**0.007**	$t_{(69)} = 3.992$	**0.000**
PC 2: Select & Predict	$t_{(36)} = 0.383$	0.704	$t_{(69)} = -0.220$	0.826
PC 3: Recruit Candidates	$t_{(36)} = 1.779$	0.084	$t_{(69)} = 2.150$	**0.035**
PC 4: Gather Information	$t_{(36)} = 4.317$	**0.000**	$t_{(69)} = 3.053$	**0.003**
PC 5: Clarify Information	$t_{(36)} = 5.325$	**0.000**	$t_{(69)} = 5.512$	**0.000**

Internal and external applicants shared common perceptions of the differences between the UW interview and the ideal interview with one exception. Both groups perceived that the purpose of the UW interview was less geared toward public relations (PC 1), gathering information (PC 4) and clarifying application data (PC 5) than the ideal interview should be. External applicants also perceived the UW interview's purpose was significantly less about recruiting applicants (PC 3) than the ideal interview should be. External applicants might therefore have been more disillusioned with the UW interview than the internal applicants.

Table 4.23d: Ideal Interview vs. UW Interview Purposes: Contract & Other Applicants Paired t-test (p=0.050)

Principal Component	Contract Applicants		Other Applicants	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1: Public Relations	$t_{(48)} = 3.664$	**0.001**	$t_{(57)} = 3.337$	**0.002**
PC 2: Select & Predict	$t_{(48)} = -1.272$	0.210	$t_{(57)} = 0.945$	0.349
PC 3: Recruit Candidates	$t_{(48)} = 2.536$	**0.015**	$t_{(57)} = 1.416$	0.162
PC 4: Gather Information	$t_{(48)} = 3.354$	**0.002**	$t_{(57)} = 3.404$	**0.001**
PC 5: Clarify Information	$t_{(48)} = 4.625$	**0.000**	$t_{(57)} = 5.994$	**0.000**

The contract group and the 'other applicants' group both perceived similar deficits in the UW interview relative to the ideal interview with one exception. Public relations (PC 1), gathering information (PC 4) and clarifying application data (PC 5) were perceived as less of a purpose of the UW interview than they should have been ideally. Contract applicants also perceived the UW interview's purpose was less geared toward recruiting applicants than it ideally should be. Contract applicants might be more disillusioned about the UW interview than other applicants.

Ideal Interview versus Ideal Admission Committee

Paired t-tests were performed to compare the differences in perceived purposes between the ideal interview and the ideal admission committee. There were few statistically significant differences between the ideal interview and the ideal admission committee in terms of perceived purpose (Appendix M shows all the statistical comparisons between the ideal interview and the ideal admission committee). The same groups outlined in the previous section were examined and the small number of statistically significant differences seemed sufficient reason to summarize only those findings in Table 4.24a/b (bolded p values highlight the statistically significant differences). The number of statistically significant differences between the perceived purposes of the ideal interview and the ideal admission committee was limited to one factor for the interviewers but included three factors for the applicants (see Table 4.24a for the statistically significant paired t-test results).

Table 4.24a: Ideal Interview vs. Ideal Committee Purposes: Significant Differences Paired t-test (p=0.050)

Principal Component	Group Tested	Ideal Int. vs. Ideal Com.	
		$t_{(DF)}$ value	p value
PC 3: Recruit Candidates	All Interviewers	$t_{(19)} = -2.416$	**0.027**
	All Applicants	$t_{(102)} = -4.716$	**0.000**
PC 4: Gather Information	All Applicants	$t_{(102)} = -2.140$	**0.035**
PC 5: Clarify Information	All Applicants	$t_{(102)} = -2.207$	**0.030**

Table 4.24b: Ideal Interview vs. Ideal Committee Purposes: Significant Differences Paired t-test (p=0.050)

Principal Component	Group Tested	Ideal Int. vs. Ideal Com.	
		$t_{(DF)}$ value	p value
PC 1: Public Relations	Contract Applicants	$t_{(46)} = -3.208$	**0.003**
PC 3: Recruit Candidates	Female Applicants	$t_{(58)} = -4.733$	**0.000**
	Internal Applicants	$t_{(36)} = -2.353$	**0.024**
	External Applicants	$t_{(66)} = -4.103$	**0.000**
	Contract Applicants	$t_{(46)} = -2.841$	**0.007**
	Applicants Excluding Contract	$t_{(56)} = -3.762$	**0.000**
PC 5: Clarify Information	Male Applicants	$t_{(44)} = -2.572$	**0.014**
	Contract Applicants	$t_{(46)} = -2.316$	**0.025**

The only statistically significant differences were ones where the purpose was perceived less applicable to the ideal interview than to the ideal admission committee. The applicants and interviewers saw recruiting

applicants (PC 3) as more a purpose of the ideal admission committee than of the ideal interview. Applicants also believed that gathering information (PC 4) and clarifying candidate information (PC 5) was more a task to be performed by the ideal admission committee than with the ideal interview.

Support for the applicant group's perception of recruiting candidates was given by all the applicant subgroups except the male applicant subgroup. The contract applicant subgroup perceived the greatest number of differences in perceived purposes (PC 1, PC 3 and PC 5). In fact the contract applicant subgroup was the only subgroup that believed public relations (PC 1) should be a purpose more of the ideal admission committee than of the ideal interview.

Perceptions of Candidate Trait(s)

Nine candidate trait components were revealed by the principal component analysis applied to respondent perceptions of the ideal interview. These components are shown in Table 4.25.

The first five components account for approximately 70% (i.e., 69.2%) of the total variance in the data and should be considered the most important components to study.

Table 4.25: Principal Component Analysis of the Ideal Interview Candidate Traits

Comp.	% Total Variance	Individual Candidate Traits	Main Component Theme
PC 1	20.4%	OD scope of practice	Professional
		OD duties	
		OD level of accountability	
		OD job demands	
		ethical principles	
		moral decision making	
PC 2	13.6%	fashion	Biases
		beauty	
		religious affiliation	
		racial identification	
		visible disability	
PC 3	12.7%	adaptability	Attitude Orientation
		perseverance	
		work ethic	
		motivation	
		perceptiveness	
PC 4	11.3%	energy level	People skills
		presence	
		body language	
PC 5	11.2%	planning skills	Team Orientation
		cooperation	
		coworker relations	
		loyalty	
PC 6	9.7%	communication skills	People Skills Plus
		interpersonal skills	
		independent judgment	
PC 7	8.0%	aggressiveness	Mixed
		problem solving skills	
PC 8	7.1%	creativity	Managerial Aptitude
		ability to delegate	
PC 9	6.0%	manual dexterity	Physical skill

Group Comparisons: The UW Interview

The same approach taken with the purposes was taken with the candidate traits in that the independent t-test was used to make several group comparisons. For each of the admission contexts (UW interview, ideal interview, and ideal admission committee), four group comparisons of perceptions were conducted: 1) applicants versus interviewers, 2) female versus male applicants, 3) internal versus external applicants, and 4) contract versus other applicants. The results of the four group comparisons are summarized in Appendix N. Only significant group differences are highlighted in Table 4.26 below (bolded p values highlight the statistically significant differences).

Table 4.26: Perceptions of UW Interview: Significant Group Differences Independent t-test (p=0.050)

Principal Component	Groups Compared	UW Interview	
		$t_{(DF)}$ value	p value
PC 1: Professional	Female vs. Male Applicants	$t_{(99)} = 2.015$	0.047
PC 3: Attitude Orientation	Applicants vs. Interviewers	$t_{(21)} = 2.937$	0.008
PC 5: Team Orientation	Applicants vs. Interviewers	$t_{(119)} = 2.021$	0.046
PC 6: People Skills Plus	Internal vs. External Applicants	$t_{(99)} = 2.364$	0.020
PC 8: Managerial Aptitude	Applicants vs. Interviewers	$t_{(119)} = 2.059$	0.042

There were three statistically significant differences between the perceptions of applicants and interviewers related to the UW interview. In all three cases, applicants showed stronger agreement than the interviewers that the UW interview evaluated attitude orientation (PC 3), team orientation (PC 5) and managerial aptitude (PC 8). There were few statistically significant differences in perception within the applicant group. Of 27 possible differences, only two statistically significant subgroup differences were found. Female applicants agreed more than the male applicants that the UW interview evaluated professional traits (PC 1) and internal applicants agreed more than external applicants that the UW interview evaluated certain people skill traits (PC 6).

Group Comparisons: The Ideal Interview

Appendix N shows the complete set of independent t-tests performed on the ideal interview candidate trait data. The statistically significant differences are shown below in Table 4.27.

Table 4.27: Perceptions of Ideal Interview: Significant Group Differences Independent t-test (p=0.050)

Principal Component	Groups Compared	Ideal Interview	
		$t_{(DF)}$ value	p value
PC 3: Attitude Orientation	Applicants vs. Interviewers	$t_{(121)} = 3.051$	0.003
PC 4: People Skills	Female vs. Male Applicants	$t_{(103)} = 2.000$	0.048
PC 6: People Skills Plus	Internal vs. External Applicants	$t_{(103)} = 2.044$	0.044

Applicants showed significantly more agreement than interviewers that the ideal interview should evaluate attitude orientation type traits. Only two statistically significant subgroup differences within the applicant group were found. Female applicants more than male applicants agreed that certain people skill type

traits should be evaluated by the ideal interview. Internal applicants more than external applicants agreed that other people skill type traits should be evaluated by the ideal interview.

Group Comparisons: The Ideal Admission Committee

Appendix N shows the complete set of independent t-tests performed on the ideal admission committee candidate trait data. The statistically significant differences are shown below in Table 4.28.

Table 4.28: Perceptions of Ideal Admission Committee: Significant Group Differences Independent t-test (p=0.050)

Principal Component	Groups Compared	Ideal Committee	
		$t_{(DF)}$ value	p value
PC 3: Attitude Orientation	Applicants vs. Interviewers	$t_{(118)} = 2.934$	**0.004**
PC 6: People Skills Plus	Applicants vs. Interviewers	$t_{(118)} = 2.731$	**0.007**
PC 8: Managerial Aptitude	Applicants vs. Interviewers	$t_{(118)} = 4.881$	**0.000**

Applicants agreed significantly more than interviewers that the ideal admission committee should evaluate attitude orientation (PC 3), people skills type traits (PC 6) and managerial aptitude (PC 8). There were no statistically significant differences between the applicant subgroups.

Summary of Significant Group Differences

Attitude orientation, team orientation, and managerial aptitude are candidate traits which applicants more than interviewers believe are evaluated in the UW interview. The evaluation of attitude orientation being more desirable according to applicants than interviewers is also true of the ideal interview and the ideal admission committee. The evaluation of people skills and managerial aptitude by the ideal admission committee is more important to the applicants than the interviewers. The applicant group is quite homogenous in its perceptions: of 81 independent t-tests of applicant subgroups, only four statistically significant differences were found.

Ideal Interview versus UW Interview

Paired t-tests were performed to compare the differences in perceived candidate traits evaluated by the ideal interview versus the UW interview. These data are presented in Tables 4.29a-d (bolded p values highlight the statistically significant differences).

Table 4.29a: Ideal Interview vs. UW Interview Traits: Applicants & Interviewers Paired t-test (p=0.050)

Principal Component	Applicants		Interviewers	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1: Professional	$t_{(101)} = -7.810$	**0.000**	$t_{(16)} = -2.517$	**0.024**
PC 2: Biases	$t_{(101)} = -6.607$	**0.000**	$t_{(16)} = -2.414$	**0.029**
PC 3: Attitude Orientation	$t_{(101)} = 7.123$	**0.000**	$t_{(16)} = 3.007$	**0.009**
PC 4: People Skills	$t_{(101)} = -0.444$	0.658	$t_{(16)} = -0.661$	0.519
PC 5: Team Orientation	$t_{(101)} = 8.257$	**0.000**	$t_{(16)} = 4.230$	**0.001**
PC 6: People Skills Plus	$t_{(101)} = 1.835$	0.070	$t_{(16)} = 3.524$	**0.003**
PC 7: Mixed	$t_{(101)} = 4.394$	**0.000**	$t_{(16)} = 3.913$	**0.001**
PC 8: Managerial Aptitude	$t_{(101)} = 3.418$	**0.001**	$t_{(16)} = 4.803$	**0.000**
PC 9: Physical Skill	$t_{(101)} = 3.381$	**0.001**	$t_{(16)} = 3.240$	**0.006**

There were numerous statistically significant differences between the candidate traits that both applicants and interviewers believed should be evaluated by the ideal interview and those that are evaluated by the UW interview. Statistically significant differences were found for seven of the principal components for the applicants and eight of the principal components for the interviewers. This suggests that both applicants and interviewers were disappointed with the UW interview. The most serious deficits were considered to be those traits, which stimulated the strongest agreement or disagreement relative to the ideal interview. By examining the agreement indexes from the descriptive analysis section or the frequency distributions in Appendix J, it is possible to get an idea whether a particular statistically significant difference is born out of the perception that, relative to the ideal interview, the UW interview under or over-emphasized evaluation of the trait type.

Analysis of the data in Appendix J showed agreement among applicants that the ideal interview should evaluate professional traits (PC 1), attitude orientation type traits (PC 3), team orientation type traits (PC 5), and aggressiveness and problem solving skills (PC 7). In contrast, the UW interview was perceived as evaluating these types of traits less in all cases except for professional traits. In this situation, the UW

interview was perceived as over-emphasizing the evaluation of optometry specific knowledge and ethics. Although the majority of applicants had disagreed that the UW interview did or should evaluate biases (PC 2: fashion, beauty, religious affiliation, racial identification, visible disability), the paired t-test suggested that the applicants were more neutral about whether the UW interview evaluated these traits.

Interviewers believed the ideal interview should evaluate attitude orientation (PC 3), certain people skills (PC 6), aggressiveness and problem solving (PC 7), and team orientation type traits (PC 5) while they were more neutral to disagreeing that the UW interview evaluated these types of traits. Like the applicants, interviewers strongly disagreed that the ideal interview should evaluate biases (PC 2); however, the perception of the UW interview was shifted towards neutrality, in that the disagreement was less strong.

Table 4.29b: Ideal Interview vs. UW Interview Traits: Female & Male Applicants
Paired t-test (p=0.050)

Principal Component	Female Applicants		Male Applicants	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1: Professional	$t_{(57)} = -5.282$	**0.000**	$t_{(44)} = -5.816$	**0.000**
PC 2: Biases	$t_{(57)} = -5.040$	**0.000**	$t_{(44)} = -4.252$	**0.000**
PC 3: Attitude Orientation	$t_{(57)} = 5.423$	**0.000**	$t_{(44)} = 4.566$	**0.000**
PC 4: People Skills	$t_{(57)} = 0.713$	0.479	$t_{(44)} = -1.456$	0.153
PC 5: Team Orientation	$t_{(57)} = 5.773$	**0.000**	$t_{(44)} = 5.900$	**0.000**
PC 6: People Skills Plus	$t_{(57)} = 0.546$	0.588	$t_{(44)} = 2.179$	**0.035**
PC 7: Mixed	$t_{(57)} = 3.418$	**0.001**	$t_{(44)} = 2.739$	**0.009**
PC 8: Managerial Aptitude	$t_{(57)} = 2.549$	**0.014**	$t_{(44)} = 2.256$	**0.029**
PC 9: Physical Skill	$t_{(57)} = 2.440$	**0.018**	$t_{(44)} = 2.319$	**0.025**

The disparity between the UW interview and the ideal interview seemed to be slightly greater for male applicants than female applicants as indicated by the number of statistically significant differences. For both female and male applicants, the UW interview was perceived as overemphasizing optometry specific knowledge and ethics (PC 1) and biases (PC 2) while it under-emphasized the evaluation of attitude orientation type traits (PC 3) and team orientation type traits (PC 5). The female and male applicants also believed the UW interview under-emphasized the evaluation of aggressiveness and problem solving skills (PC 7), managerial aptitude (PC 8) and manual dexterity (PC 9). Only male applicants perceived the UW interview to under-emphasize the evaluation of traits mostly pertaining to people skills: communication skills, interpersonal skills, and independent judgment (PC 6).

Table 4.29c: Ideal Interview vs. UW Interview Traits: Internal & External Applicants Paired t-test (p=0.050)

Principal Component	Internal Applicants		External Applicants	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1: Professional	$t_{(35)} = -3.006$	**0.005**	$t_{(66)} = -8.093$	**0.000**
PC 2: Biases	$t_{(35)} = -3.544$	**0.001**	$t_{(66)} = -5.559$	**0.000**
PC 3: Attitude Orientation	$t_{(35)} = 3.851$	**0.001**	$t_{(66)} = 6.041$	**0.000**
PC 4: People Skills	$t_{(35)} = 0.948$	0.350	$t_{(66)} = -0.983$	0.329
PC 5: Team Orientation	$t_{(35)} = 4.291$	**0.000**	$t_{(66)} = 7.152$	**0.000**
PC 6: People Skills Plus	$t_{(35)} = 1.168$	0.251	$t_{(66)} = 1.405$	0.165
PC 7: Mixed	$t_{(35)} = 3.658$	**0.001**	$t_{(66)} = 2.945$	**0.005**
PC 8: Managerial Aptitude	$t_{(35)} = 3.454$	**0.002**	$t_{(66)} = 1.921$	0.059
PC 9: Physical Skill	$t_{(35)} = 0.784$	0.439	$t_{(66)} = 3.673$	**0.001**

There was agreement among the internal and external applicants about five of the six disparities they perceived between the UW interview and the ideal interview. Both groups believed the UW interview over-emphasized the optometry specific knowledge and ethics (PC 1) and the biases (PC 2). Both groups believed the UW interview under-emphasized the evaluation of attitude orientation type traits (PC 3), team orientation type traits (PC 5) and aggressiveness and problem solving skills (PC 7). Internal applicants believed the UW interview under-emphasized the evaluation of managerial type traits (PC 8) while external candidates believed the UW interview under-emphasized physical skills (PC 9).

Table 4.29d: Ideal Interview vs. UW Interview Traits: Contract & Other Applicants Paired t-test (p=0.050)

Principal Component	Contract Applicants		Other Applicants	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1: Professional	$t_{(44)} = -6.977$	**0.000**	$t_{(57)} = -4.754$	**0.000**
PC 2: Biases	$t_{(44)} = -4.777$	**0.000**	$t_{(57)} = -4.628$	**0.000**
PC 3: Attitude Orientation	$t_{(44)} = 5.694$	**0.000**	$t_{(57)} = 4.516$	**0.000**
PC 4: People Skills	$t_{(44)} = 0.424$	0.674	$t_{(57)} = -0.825$	0.413
PC 5: Team Orientation	$t_{(44)} = 6.005$	**0.000**	$t_{(57)} = 5.766$	**0.000**
PC 6: People Skills Plus	$t_{(44)} = 0.879$	0.384	$t_{(57)} = 1.656$	0.103
PC 7: Mixed	$t_{(44)} = 2.425$	**0.020**	$t_{(57)} = 3.893$	**0.000**
PC 8: Managerial Aptitude	$t_{(44)} = 1.959$	0.057	$t_{(57)} = 2.794$	**0.007**
PC 9: Physical Skill	$t_{(44)} = 2.786$	**0.008**	$t_{(57)} = 2.074$	**0.043**

Once again, both groups believed there was an overemphasis in the UW interview of optometry specific knowledge and ethics (PC 1) and biases (PC 2). The evaluation of attitude orientation type traits (PC 3), team orientation (PC 5), attitude/cognitive traits (PC 7), and manual dexterity was perceived as under-

emphasized by the UW interview. The applicant subgroup excluding contract applicants also perceived a deficit in the UW interview's attention to evaluating managerial aptitude (PC 8).

Ideal Interview versus Ideal Committee

Statistically significant differences in the candidate traits to be assessed by the ideal interview versus the ideal admission committee were limited to one trait type for interviewers and four trait types for applicants (Appendix O summarizes the entire set of paired t-test results). The statistically significant findings are listed below in Table 4.30a (bolded p values highlight the statistically significant differences).

Table 4.30a: Ideal Interview vs. Ideal Committee Traits: Significant Differences Paired t-test (p=0.050)

Principal Component	Group Tested	Ideal Int. vs. Ideal Com.	
		$t_{(DF)}$ value	p value
PC 4: People Skills	All Applicants	$t_{(100)} = 3.793$	**0.000**
PC 5: Team Orientation	All Applicants	$t_{(100)} = -2.876$	**0.005**
PC 6: People Skills Plus	All Applicants	$t_{(100)} = 2.628$	**0.010**
PC 9: Physical Skill	All Applicants	$t_{(100)} = -2.966$	**0.004**
	All Interviewers	$t_{(18)} = -2.857$	**0.011**

Interviewers seemed to perceive only one statistically significant difference between what the ideal interview should assess and what the ideal admission committee should assess: manual dexterity (PC 9) was less appropriate a trait to assess in the ideal interview than by the ideal admission committee. This view was supported by the applicants. Applicants also perceived team orientation (PC 5) as the type of candidate trait that should be assessed more by the ideal admission committee than by the ideal interview itself. Applicants agreed that the ideal interview should assess people skill type traits (PC 4 and PC 6) more than the ideal admission committee. The views of the entire applicant group were supported by several of the subgroups (see Table 4.30b for these paired t-test results).

Table 4.30b: Ideal Interview vs. Ideal Committee Traits: Significant Differences Paired t-test (p=0.050)

Principal Component	Group Tested	Ideal Int. vs. Ideal Com.	
		$t_{(DF)}$ value	p value
PC 2: Biases	Applicants Excluding Contract	$t_{(58)} = -2.061$	0.044
PC 4: People Skills	Female Applicants	$t_{(55)} = 4.023$	0.000
	Internal Applicants	$t_{(35)} = 2.193$	0.006
	External Applicants	$t_{(65)} = 2.727$	0.008
	Contract Applicants	$t_{(42)} = 3.071$	0.004
	Applicants Excluding Contract	$t_{(58)} = 2.386$	0.020
PC 5: Team Orientation	Female Applicants	$t_{(55)} = -2.018$	0.049
	Male Applicants	$t_{(45)} = -2.041$	0.047
	External Applicants	$t_{(65)} = -2.155$	0.035
	Applicants Excluding Contract	$t_{(58)} = -2.804$	0.007
PC 6: People Skills Plus	Male Applicants	$t_{(45)} = 2.500$	0.016
	Applicants Excluding Contract	$t_{(58)} = 2.783$	0.007
PC 9: Physical Skill	Female Applicants	$t_{(55)} = -2.820$	0.007
	Internal Applicants	$t_{(35)} = -2.229$	0.033
	Applicants Excluding Contract	$t_{(58)} = -2.264$	0.027

Applicant subgroup agreement with the entire applicant group was greatest for people skills involving energy level, presence, and body language (PC 4) and team orientation (PC 5). Of interest, the fewest statistically significant differences were found for the contract subgroup (PC 4 only). The subgroup, containing all remaining applicants, perceived the greatest differences between the traits to be assessed by the ideal interview and the ideal admission committee (PC 2, PC 4, PC 5, PC 6 & PC 9).

Possible Changes to the UW Interview

Three components were revealed by the principal component analysis applied to respondent perceptions of possible changes to the UW interview. These components are shown in Table 4.31.

Table 4.31: Principal Component Analysis of Possible Changes To The UW Interview

Comp.	% Total Variance	Individual Changes	Main Component Theme
PC 1	41.0%	who interviews	Interviewer Effect
		interviewer training	
		topics covered	
		question style	
		interview importance	
PC 2	33.2%	interview length	Interview Format
		interviewer number	
		candidate question period	
PC 3	25.8%	amount candidate knows	Candidate Impact
		candidate stress level	

Group Comparisons of Possible Changes

Independent t-tests were performed to compare the perceptions of applicants with interviewers with respect to possible changes to the UW interview. Table 4.32 shows these results.

Table 4.32: Possible Changes To The UW Interview: Significant Group Differences Independent t-test (p=0.050)

Principal Component	Groups Compared	UW Interview	
		$t_{(DF)}$ value	p value
PC 1: Interviewer Effect	Applicants vs. Interviewers	$t_{(37)} = -6.536$	**0.000**
PC 2: Interview Format	Applicants vs. Interviewers	$t_{(90)} = 0.264$	0.792
PC 3: Candidate Impact	Applicants vs. Interviewers	$t_{(90)} = 0.969$	0.335

The one significant group difference involved interviewer effect. Interestingly, interviewers agreed significantly more than applicants that the UW Optometry Admission Committee should consider changing aspects of the interview that for the most part pertained to the interviewer (e.g., who interviewed, training requirements, topics covered, style of question). When considering the agreement indices, the significant difference is most likely the result of the perceived differences in the need for interviewer training, the topics covered and the weighting of the interview.

Possible UW Interview Biases: Group Differences

Respondents had been asked to reflect on their experiences with the UW interview plus what they had heard others say of their experiences with the UW interview. With those reflections in mind, they indicated their level of agreement with whether some candidates were exposed to incidents of certain types of bias. Table 4.33 shows the compared group perceptions of biases in the UW interview.

Table 4.33: Perceptions of Biases: Significant Group Differences Independent t-test (p=0.050)

Bias	Groups Compared	UW Interview	
		$t_{(DF)}$ value	p value
sexism	Applicants vs. Interviewers	$t_{(117)} = -3.615$	**0.000**
racism	Applicants vs. Interviewers	$t_{(117)} = -1.675$	0.097
homophobia	Applicants vs. Interviewers	$t_{(116)} = -1.642$	0.103
ageism	Applicants vs. Interviewers	$t_{(117)} = -4.092$	**0.000**
beautyism	Applicants vs. Interviewers	$t_{(117)} = -3.574$	**0.001**

Applicants and interviewers held significantly different perceptions about whether incidents of sexism, ageism and beautyism occurred in the UW interview. This finding concurred with the descriptive analysis.

The t-tests showed that applicants disagreed with the existence of these types of biases more than the interviewers. In other words, interviewers were less sure than the applicants that the UW interview was devoid of such biases.

Highlights of Statistical Analyses

The following statements are suggested by the statistically significant findings from the statistical analyses of the survey.

1. Applicants perceived the UW interview's purpose was less about public relations and more about selection and prediction than did the interviewers. Interviewers more than applicants disagreed that the UW interview's purpose was to clarify candidate information.
2. There were no statistically significant differences between the applicants' and the interviewers' perceptions of purpose for the ideal interview or the ideal admission committee.
3. The applicant group was fairly homogeneous in its perceptions of purpose: in 45 independent t-tests of applicant subgroups, only four statistically significant differences were found.
4. Applicants believed that gathering information, clarifying candidate information and recruiting applicants was more a task to be performed by the ideal admission committee than with the ideal interview. Interviewers concurred on the last purpose (i.e., recruiting applicants).
5. There were more statistically significant disparities between the perceived purposes of the UW interview versus that of the ideal interview for applicants than for interviewers. According to the applicants, the UW interview was viewed as less about public relations, recruitment, gathering information, and clarifying information than it should be ideally. Interviewers concurred on the last purpose (i.e., clarifying information) and perceived the UW interview as deficient in the area of selecting and predicting success.
6. Applicants agreed significantly more than interviewers that the UW interview evaluated candidate attitude orientation, team orientation and managerial aptitude.
7. Applicants agreed significantly more than interviewers that the ideal interview should evaluate candidate attitude orientation.
8. Applicants agreed significantly more than interviewers that the ideal admission committee should evaluate candidate attitude orientation, people skills, and managerial aptitude.

9. The applicant group is quite homogeneous in its perceptions in that, of 81 independent t-tests of applicant subgroups, only four statistically significant differences were obtained.
10. According to interviewers and applicants, manual dexterity was less appropriate a candidate trait to assess with the ideal interview than by the ideal admission committee. According to applicants, the ideal interview should evaluate people skills more and team orientation less than the ideal admission committee.
11. Relative to the ideal interview, applicants believed the UW interview overemphasized professional traits and under-emphasized attitude orientation, team orientation, aggressiveness and problem solving skills. Interviewers concurred plus they perceived the UW interview as under-emphasizing the evaluation of certain people skills.
12. Both applicants and interviewers believed the ideal interview should not be influenced by biases, however they were more neutral about whether the UW interview actually did. Interviewers in particular were less optimistic than applicants in terms of incidents of sexism, ageism and beautyism occurring during the UW interview.
13. Interviewers agreed significantly more than applicants that changes to the UW interview should involve interview mediated effects such as training requirements, who interviews, topics covered and the question style.

Survey: Summary of Written Comments

Forty-four candidates and nine interviewers took the time to write comments in the final section (X) of the questionnaire. The comments were generally directed at the UW interview, with most expressing a concern about it. For the most part, applicant and interviewer comments tended to focus on different aspects of the interview. Several participants made comments about the design of the questionnaire.

Applicant concerns about the UW interview centered around issues related to: 1) the interview team composition (e.g., "Interview team should include an optometry student. A student might be able to pick up some things that a faculty member won't due to the different points of view of their positions."); 2) the interview length (e.g., "I feel more time should be allotted to the interview. I have always felt rushed or felt like there was more we could've discussed."); 3) interview content (e.g., "the interview should concentrate on items that are not reflected by their [the candidates'] GPA, OAT, and essay/references."); 4) interviewer

access to the application (e.g., "the UW interviewers should read the autobiography and essay before the interview in order to clarify information contained in them."); and 5) the amount of information provided to candidates (e.g., "Let the students know the role/importance of the interview. More information should be given regarding the interview so that students know how to prepare for it.").

Interviewer concerns focused more on: 1) interview content (e.g., "Some of the questions suggested on the interview form are not suitable and hence are rarely ever used."); 2) biases (e.g., "beauty, religious affiliation, racial identification, visible disability may influence thinking."); and 3) the predictive ability of the interview (e.g., "The interview works to predict who will fail as an optometrist and optometry student, rather than who will succeed.").

The comments of several candidates pertained to the questionnaire design. There were mixed feelings about the length and the wording of the survey. Some felt the estimated 20 minutes to complete the survey was reasonable while others felt it took longer. Some respondents found the wording very clear while some became confused by the similarity of the admission contexts. Suggestions made by respondents about what else could have been covered by the survey tended to relate to the opportunity to provide more opinions about the interview content, format and use.

Summary of Chapter

Statistical comparisons of admission data between 1992 and 1996 suggest that the 1996 class was representative of recent admission years. The response rate to the survey of almost 72% is considered robust and sufficient to represent the target groups. The perceived purpose of the UW interview appears to be to gather information and select candidates by assessing 'professional' and certain 'people skills' type traits. The ideal interview is perceived as having a greater number of purposes (i.e., including clarify candidate information and provide information to the candidate) and assessing more candidate traits (i.e., including attitude orientation and team orientation).

The descriptive and statistical analysis show that applicants and interviewers held different perceptions of the UW interview and the UW interview fell short of the ideal interview in a number of ways. Of great

interest was that despite the widespread deficits noted in the UW interview, only two of the 129 respondents (i.e., <2%) indicated they would like the UW interview eliminated from the admission process.

CHAPTER 5: DISCUSSION

General Summary of Findings

This study showed that, in terms of perceived purpose and content, UW applicants and interviewers held similar views of the ideal interview yet significantly disparate views of the UW interview. Compared to interviewers, applicants perceived the UW interview was significantly less about public relations and significantly more about selection, prediction, information clarification, and the assessment of 'attitude orientation', 'team orientation', and 'managerial aptitude' traits.

In addition, the study revealed significant differences between the participants' experiences with the UW interview and their expectations of an ideal interview. According to applicants, UW interview deficiencies in purpose pertained to public relations, recruitment, information gathering and information clarification. The deficiencies according to the interviewers were limited to selection, prediction and information clarification. Both interviewers and applicants believed the UW interview over-emphasized the assessment of 'professional' skills and 'biases' while it under-emphasized 'attitude orientation', 'team orientation', 'managerial aptitude' and 'manual dexterity'. Interviewers were also concerned that the UW interview under-emphasized the evaluation of certain aspects of 'people skills'. Despite the apparent widespread disillusionment with the UW interview, support for the continuation of the selection tool was strong, although interviewers favored greater revisions to the UW interview than did applicants.

The Ideal Interview

Based solely on the items which generated the highest level of agreement among both applicants and interviewers, the image of the ideal interview was that its purpose was to gather information from candidates, clarify information in the application, provide information to candidates (an aspect of public relations), and select candidates by appraising their 'people skills', 'professional', and 'attitude orientation' type traits. Both groups agreed that 'bias' type candidate traits should not factor into the ideal interview.

The similarity among participants in the perceived purpose and content of the ideal interview is an important finding. It means that it may be possible to design an interview that would satisfy the agendas of both the UW applicants and their interviewers. It is an assumption of this thesis that achieving this kind of

congruency is desirable. If both groups approach the interview with a common agenda, then the behavior of the participants will reinforce that agenda and lead to the participants feeling satisfied with their interview experience. Satisfaction with the interview will translate into a perception that it is a worthwhile endeavor.

Although UW faculty agreed the interview was an important part of the admission process, their sense of duty was the over-riding determinant for their participation in the UW interview. This finding suggests that the driving force behind their participation was more of an 'I should' rather than an 'I want to' attitude. It is important to note that faculty participation in the interview process was voluntary. Each year, on-site interviews were scheduled in April for internal applicants and in May to early June for external applicants. Once an optometry staff member had scheduled the applicants into one of these blocks, the staff member then approached each faculty member individually. Depending on the faculty member's availability and interest in the task, a certain amount of interviewing time was offered. In years where the 'volunteer' level was insufficient to meet the need, the Director of the School encouraged participation by writing a memo to the faculty in support of the admission process and reminding the faculty of their administrative responsibilities. After the memo had been sent, the staff member approached faculty, repeatedly if necessary, until all the interview times were covered. There were two ways in which the level of participation in the interview process could be acknowledged by the School administration. Faculty members could include this service contribution in their annual activity report. The report was used by the administration to assign a composite 'grade' reflecting scholarship, teaching and service. The grade would be part of any future promotion and/or tenure consideration. The School administration also monitored the number of interview hours contributed annually by each member because this information figured marginally into a stipend paid annually to faculty. These acknowledgments of the interview contribution may have motivated some faculty members to participate; however, the impact of this one service commitment would be quite small compared to teaching in clinic, publishing a paper or obtaining a research grant. In view of the many demands placed on faculty, particularly in recent years when the faculty complement has decreased, the interview's perceived worthiness is seen as pivotal to their enthusiasm to interview.

In contrast, one could argue that a worthwhile interview in the mind of an applicant is one which is deemed to be a fair selection tool. Studies have shown that applicants are most likely to perceive a selection tool as fair when they believe it is: 1) widely used (Steiner & Gilliland, 1996), 2) a logical tool for identifying qualified applicants (Smither, Reilly, Millsap, Pearlman & Stoffey, 1993; Steiner & Gilliland, 1996), 3) a method with which employers have a right to obtain information (Rynes & Connerley, 1993; Steiner & Gilliland, 1996), and 4) a way to differentiate the applicants (Gilliland, 1994; Steiner & Gilliland, 1996). An argument made in this thesis is that perceived fairness according to an applicant also depends on the congruity of the applicant's goals with those of the interviewers and the institution.

This study was approached with the belief that individuals develop ideal models of situations against which they judge their experiences. In the case of selection interviews, this would mean that interview participants judge their satisfaction with an interview experience based on their pre-conceived model of an 'ideal interview'. The Psychology literature contains numerous studies (e.g., Campion, Pursell, and Brown, 1988), which describe ways of raising the psychometric properties of the selection interview, however no published studies have approached the interview from the perspective that peoples' experiences help shape their expectations of what an interview should be like. The references to idealized models of selection tend to be limited to those which describe ideal selection policies for healthcare professional programs (e.g., Powis, 1994) and those that have shown interviewers approach the interview with a vision of the 'ideal applicant' in mind (Bolster & Springbett, 1961; Hakel, Hollman & Dunnette, 1970; Sydiaha, 1961; Webster, 1964).

The similarity in perceptions of the ideal interview suggests that participants, through a variety of means, come to attach a common meaning to the event known as the optometry admission interview. The understanding of what an interview means derives from experience with interviews and interactions with others regarding interviews. This study supports a view that the interview has come to symbolize a valued step in the selection process during which attention is focused on the assessment of the candidate's humanistic skills. A consideration of several studies supports viewing the ideal interview as the symbol of humanistic skills assessment. First of all, the desire to measure humanistic skills of healthcare professional applicants is very strong (Johnson & Edwards, 1991; McGagie, 1990; Myslinski & Jeffrey, 1985; Powis, 1994; Spafford, 1995). This desire suggests that admission committees will include at least

one selection tool in their admission process that will attempt to assess these qualities. In fact, a commonly stated purpose of conducting healthcare professional admission interviews has been to evaluate humanistic skills (Johnson & Edwards, 1991; Spafford, 1995). Secondly, of the selection tools that might be able to appraise humanistic skills, the interview receives the most weight in admission decisions (Johnson & Edwards, 1991; Puryear & Lewis, 1981; Spafford, 1995). These findings highlight the desire to evaluate humanistic skills. Finally, the use of the admission interview by healthcare professional programs is widespread (Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985; Puryear & Lewis, 1981; Spafford, 1995; Willer, Keill, & Isada, 1984). Interestingly, the widespread use of the interview has been a major determinant of perceived face validity and fairness (Steiner & Gilliland, 1996). Viewing the healthcare admission interview as an event which is equated with the strong desire to evaluate humanistic skills assessment is consistent with a symbolic interactionist approach.

The description of the ideal interview obtained in this study provides a template with which the UW optometry faculty could begin to revise their admission interview if they deemed it was deficient in some way. The UW School of Optometry, Doctor of Optometry Program booklet states that the purpose of the UW interview is to clarify candidate information and predict future performance. Implicit in this statement is the goal to gather information. Agreement among applicants and interviewers that the ideal interview should seek to predict future performance as an optometrist was not as strong as for some of the other suggested purposes (3.1 and 2.3, respectively). This suggests that participants believe this purpose is either less important or less obtainable than other purposes, therefore in the eyes of the participants, the UW admission booklet may place too much prominence on the prediction purpose. The lack of attention in the UW admission booklet to candidate selection and provision of information to candidates is an indication of a potential omission in the minds of participants.

The only statistically significant group difference in the perception of the ideal interview was that applicants agreed significantly more than interviewers that the candidate's 'attitude orientation' should be evaluated. A break-down of the 'attitude orientation' theme into its components, reveals: motivation, perseverance, work ethic, adaptability, and aggressiveness. All five of these traits appeared in the candidates' 'top 10 candidate traits' to be assessed by the ideal interview. The large number of candidate traits that applicants identified as desirable for an ideal interview (i.e., 23 by descriptive analysis) suggests that they

had high expectations of an interview to differentiate candidates in the selection process. In view of the known competitive nature of the admission process, particularly with respect to academic measures, candidates likely hoped that the interview would help reveal non-cognitive (e.g., humanistic) qualities not found in the written application that would strengthen their chances of receiving an offer of admission. The 'attitude orientation' theme contained traits that may have reflected in the minds of the applicants how much they wanted to become an optometrist: e.g., motivation, work ethic, and perseverance. 'Wanting it' may have been a pivotal message that applicants believed they must convey to the interviewers. In the presence of intense competition, candidates may have wished the interviewers to believe that compared to other candidates, they were the candidates who wanted an offer more and would work harder. In support of this postulate, the value of assessing motivation was highlighted by one applicant who expressed frustration about the content of the UW interview, "I don't think these questions reflect my potential or reveal anything about myself, my motivation or why I would be an excellent optometrist/student of optometry".

In summary, the commonly held perception of the ideal interview among applicants and interviewers was seen as evidence that through past experience, they had attached a similar meaning to the concept of the 'selection interview'. This common vision provided a framework for judging the participants' opinions of the UW interview. Indications from the description of the UW interview in the UW admission booklet provided an expectation that participants would not be satisfied with the UW interview, in that the stated goals diverged from what participants believed to be pertinent in an ideal interview. The significantly greater emphasis on 'attitude orientation' by applicants than interviewers was seen as indicative of the importance applicants placed on showing their motivation for joining the optometric profession.

The UW Interview

Based on the items which generated high levels of agreement among both applicants and interviewers, the image of the UW interview was that its purpose was to gather information from candidates and select them by appraising mostly their 'professional' traits and, to a very limited extent, some 'people skills' and 'attitude orientation' type traits. The agreement indexes suggest that applicants believed twice as many candidate traits were assessed by the UW interview than did the interviewers. Both groups agreed that the UW interview did not clarify information or appraise 'bias' type traits or manual dexterity.

There were numerous statistically significant differences between the perceptions held by applicants and interviewers regarding the purposes and the content of the UW interview. These incongruities are considered important because they are seen as indicators of participant dissatisfaction with the UW interview. In essence, experiencing a UW interview left participants unclear about its purpose or content. Without this clarity, participants were more likely to conclude the UW interview was either not worthwhile or at least less worthwhile than they had hoped. These incongruities also suggest that the UW optometry admission administrators had limited success in clearly conveying the purpose and content of the UW interview to the participants. Incongruities between what raters and applicants believe should be assessed have been shown in studies of medical residency program admissions (Villanueva, Kaye, Abdelhak, & Morahan, 1995; Zagumny & Rudolph, 1992).

Statistical comparisons of agreement levels revealed that applicants perceived the purpose of the UW interview was significantly less about public relations and significantly more about selection, prediction and clarifying information than did the interviewers. The descriptive analysis supported the perceived differences in public relations and prediction. The agreement indexes suggested that the group difference regarding public relations stemmed largely from the perceptions of the UW interview's ability to reduce the candidate's concerns and provide information to the candidate about the admission process (rather than to provide a chance to meet faculty). In addition, applicants believed that the UW interview assessed 'attitude orientation', 'team orientation' and 'managerial aptitude' type candidate traits significantly more than did the interviewers. The descriptive analysis supported these differences and it indicated that assessing people skills was perceived of as more important to applicants than interviewers.

The importance placed on the role of providing public relations was one of the group differences in perceived purpose of the UW interview. A stated common goal among medical, dental and optometry admission committees is to provide a humane admission process (Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985; Spafford, 1995). This might be accomplished by providing the public relations type functions investigated in this thesis: providing candidates with information, meeting faculty and reducing candidate stress. Although the UW interviewers and applicants agreed on the importance of aspects of public relations in the ideal interview, applicants perceived the UW interview as geared less toward public

relations than did interviewers. It is argued in this thesis that part of the applicant's perception of fairness hinged on how they were treated by the interviewers. This premise is supported by studies which have found that perceived fairness of selection tools depends, in part, on interpersonal treatment such as warmth and sensitivity (Bies & Moag, 1986; Steiner & Gilliland, 1996). The findings of this investigation suggest that the UW interview was found to be lacking in its attention to public relations and that this perceived deficit would decrease the applicants' confidence in the interview's fairness.

Applicant opinions regarding the UW interview would derive from: their experiences during the UW interview itself, their exposure to the information in the UW School of Optometry, Doctor of Optometry Program booklet, and their exposure to hearsay about the UW interview within the applicant and optometry student populations. In the presence of limited information available about the UW interview (i.e., one statement in the UW School of Optometry, Doctor of Optometry Program booklet), the interviewers' conduct, including what they said during the interview, would to a large extent shape whether the applicant believed the purpose of the UW interview was to gather or clarify information, promote the program, recruit them, reduce their stress, or provide them with information about the admission process. In contrast, the typical experiences of candidates would not help them decide whether the UW interview was used to select candidates or predict future success because these functions occurred subsequent to the interview and apart from the candidates.

The admission booklet was available to all applicants, though how familiar applicants were with the information provided therein is unknown. If the applicant had read the description of the interview, then there might have been an expectation that the UW interview was intended to clarify information and to predict success as an optometrist. The statement could have contributed to the applicants' relatively greater agreement than the interviewers with these purposes. It is important to note that applicants appeared partially misinformed about the reasons they were offered a UW interview. The survey responses revealed that they incorrectly assumed non-academic variables factored into the decision to offer them an interview.

The impact of hearsay on respondent opinion is hard to measure but certainly the existence of a rumor mill has been evident in the questions posed by applicants during the annual School of Optometry

Admission Information Night. Many questions have started off with, "I've heard that you have to....". The UW optometry admission booklet's description of the interview did not specify what types of candidate traits would be assessed. It made reference only to the appraisal of "personal qualifications". As a result, the applicant's perception of what traits were assessed would be based either solely on the UW interview experience or in combination with rumors about the UW interview.

Although interviewers were not instructed to describe the role of the interview in the admission process, some interviewers might have shared a personal view of the UW interview. In one case, a respondent indicated that the interviewer said in reference to the UW interview, "this doesn't count for much; it's mainly marks because marks are the least subjective thing". Comments such as this would certainly affect the applicant's view of the UW interview's role. Of interest, this applicant supported significant revisions to the UW interview.

If rumors were a major factor in influencing candidates, then it would be the internal applicants, with the greatest exposure to rumors, who would be most affected. Parametric statistical testing was conducted to test for applicant homogeneity with respect to perceptions of the UW interview, the ideal interview and the ideal admission committee. Of 126 independent t-tests (see Appendix L & N), only nine statistically significant differences were found in terms of applicant subgroups: female versus male (2), internal versus external (4), and contract versus other (3). Two inferences can be made from these findings about the perceptions of applicants sought in this study. First of all, the applicant pool was, for the most part, homogenous in its perceptions. Secondly, the experience of being an internal rather than an external candidate was not an important factor in determining perceptions. This second point provides indirect evidence that rumors were not a major determinant in the perceptions sought.

The main determinants of the interviewers' perceptions of the UW interview would derive from: their experience with the UW interview, their reasons for participating in the interview process, their experience, if any, on the Admission Committee, and their experience with admitted students. Unlike applicants, interviewers had access to the bank of interview questions. The influence of the interviewers having access to the interview questions was evident in the level of agreement demonstrated by interviewers with regard to the candidate traits assessed by the UW interview. The four highest agreement levels pertained

to knowledge about the optometrist's duties, scope of practice, accountability and job demands. These traits represent the four sections on the interview question sheet. In contrast, the agreement levels demonstrated by applicants that pertained to the interview question sections, although quite high, were mixed among a group of seven traits. The knowledge focus of the interview questions appeared to limit the ability of interviewers to assess additional applicant qualities they deemed relevant. The survey showed that faculty agreed to interview more out of a sense of duty than because they believed the interview was an important part of the admission process. This could account, in part, for their relatively lower agreement level than applicants with selection as a purpose.

Fifty percent of the interviewers had sat on the Admission Committee. Their experiences in the admission meetings would have played a major role in their opinion of the UW interview. All faculty dealt with admitted students and these interactions would shape their opinion of the interview's predictive value.

There are very few published studies on professional gatekeeping in the optometric profession. Any respondents to this survey who had read even the abstracts of those studies would most likely have been faculty. If such exposure occurred, then the respondent might have been aware of the only two published studies of the UW interview (Spafford, 1994a; 1994b). These studies have shown that: 1) the weight of the UW interview in admission decisions is considerably less than for any of the UW academic measures (Spafford, 1994a); 2) the UW interview score does not predict either academic or clinical performance in the optometry program (Spafford, 1994a); and 3) interviewer scores reflect admission academic grades rather than interview performance when interviewers are allowed to access the written application (Spafford, 1994b). These type of studies may have contributed to undermining the confidence, particularly of interviewers, in the UW interview's place within the selection process or in its ability to predict future performance.

Selecting candidates was a desirable purpose of the ideal interview and a perceived purpose of the UW interview. An examination of the weight placed on the various UW optometry selection tools provided a way of checking out how accurately participants viewed the UW interview. As noted earlier in the thesis, there are no fixed weights assigned to UW optometry admission variables, thereby making it difficult to quantify their effect on admission decisions. In an attempt to quantify variable weightings, studies were

conducted that calculated the proportion of the 60-member admitted UW optometry class that would still have been admitted if the selections from the applicant pool of over 250 individuals had been made strictly on the basis of obtaining one of the top 60 performances in individual selection tools (Spafford, 1994a; Appendix P). The lower weight placed on interviews relative to academic measures in UW optometry selection decisions was evident. Between 1991 and 1996, the top mean interview score (MIS) performers represented, on average, 53.1% while the top overall mean transcript (OM) performers represented, on average, 77.0% of the actual admitted class. The transcript measures such as median score, overall mean and prerequisite mean accounted for the largest 'top 60' membership proportions of the actual class. The greater reliance on transcript performance relative to other selection tools is not unique to the UW program. The academic emphasis among optometry program admission committees is widespread (Spafford, 1995).

Some attention to the history of the UW interview format is warranted. The current UW interview questions have been in place since the late 1980s. Prior to then, numerous differences existed in the interview format encountered by internal versus external applicants. Although I was unable to determine how many years these differences had existed, I do know that the type of interview I encountered as an internal applicant in 1978 was different than what an internal applicant encountered in 1986 when I became Admission Officer. By the mid-1980s, two different interview question sheets existed: one for internal applicants and one for external applicants. This was not the only difference in the interview experience. Internal applicants received a 20-minute individual interview with no interviewer access to the application while external applicants received a 30-minute panel interview with interviewer access. In addition, the criteria for interviewing differed across applicant groups. All internal applicants were interviewed. In contrast, external off-site applicants were interviewed if they could be scheduled during the site visit while external on-site applicants were interviewed depending on their academic performance. The rationale I was given for these differences pertained to the large number of internal applicants. It was argued that the number of internal applicants precluded file review, the 30-minute interview, or the panel interview team given to external applicants. In addition to my concern that the interview experiences of internal and external applicants were notably different, I was concerned about the nature of some sections on the interview sheet that seemed potentially biased. For example, the interviewer was asked to judge the physical appearance of the candidate. After working as Admission Officer for a couple years, I

suggested that the UW interview needed revision. I approached the faculty's decision making body (the Administrative Council) with my concerns (that were echoed by the Admissions Administrator of the time). Numerous options were discussed with the Council, including hiring a professional interview team. In view of the significant costs of this option, a compromise was made in which a consultant from UW's Human Resources Department was approached. After reviewing the interview content, the consultant made numerous recommendations about the UW interview. The type of interview supported by Human Resources at that time was a very knowledge-based interview. I argued for greater consistency in interview format between internal and external applicants and a removal of overtly biased questions. The faculty accepted the recommendations made by the consultant and me. The result was the current UW interview.

During the period from 1991 to 1996, the top 60 OAT performers represented, on average, 50% of the optometry class membership. The lower weight placed on the standardized OAT relative to the semi-structured interview may seem initially surprising, however the UW optometry Admission Committee only began incorporating the OAT scores into its deliberations in 1990. It quickly became apparent that Canadian educated individuals tended to perform in the upper percentile ranges of this American designed standardized test. For example, between 1992 and 1996, the mean OAT score among UW optometry applicants fell into the 93rd to 95th percentile band. As this became apparent, the presence of high OAT scores among applicants held less meaning to the Committee than the scores initially held.

Between 1992 and 1996, Spafford (Appendix P) found that the average proportion of the admitted classes accounted for by the autobiographic sketch score (ABS) was 65.0% and, for the applicants having completed all their recommended prerequisite courses, it was only 33.7%. The ABS proportion may seem surprisingly high for a non-academic measure in view of the apparent reliance on academic measures by the Admission Committee. A possible explanation may be that one of the four measures that make up the ABS score is Awards (the others are special training, volunteer work, and extracurricular activities). The Awards measure is the most common one of the four to be rated exceptional and it is often due to the acquisition of academic awards. These awards would be more prevalent among applicants with high postsecondary academic achievement so there may be a bit of an academic bias to the ABS scores. Further study of the four measures making up the ABS would provide an interesting future study.

Comparing early versus late decisions during the main admission meeting, in terms of various admission variables, provided another way of quantifying the use of certain admission variables in making selection decisions. Spafford (see Appendix P for results) combined the 1992 to 1996 admission decision data. This was deemed appropriate in view of the statistical tests that revealed a consistent applicant pool during that period. Comparisons were made of the mean interview scores of those receiving the first 10 offers of the main admission committee meeting with the mean interview scores of those receiving the last 10 offers. The applicants receiving the last 10 offers had significantly higher interview scores, more completed recommended prerequisites, lower transcript means and lower OAT scores than applicants receiving the first 10 offers. There were no statistically significant differences between applicants receiving the last 10 offers and those who were placed on the contingency list. Finally, the applicants receiving the last 10 offers had significantly better interview scores, more completed recommended prerequisites, and better autobiographic sketch scores than the 10 applicants who were refused an offer but had obtained the same overall mean (these 10 refused applicants, with equal overall means, were picked randomly for the purposes of the study).

The results of these two 5-year studies (Spafford, 1994a; Appendix P) suggest three main points: 1) UW interview scores hold notably less weight than postsecondary transcript measures in making selection decisions; 2) in the presence of excellent academic performance, it appears that a strong interview performance and completion of the recommended prerequisites is not as critical to receiving an offer; and 3) the interview score and the completion of the recommended prerequisites carries more weight in the later admission decisions.

A discussion of the UW optometry interview in the selection process should consider the issue of interview reliability. The UW interview involves a 2-interviewer, panel format. On-site interview teams are assigned by interviewer availability. As noted earlier in Chapter 4 (Results), interviewer respondents estimated that they interviewed, on average, eight to nine applicants annually, although the range went from 1 to 16. These numbers would be typical for on-site interviewers. The off-site interviewer team was the same for a given year (in fact, it was the same between 1992 and 1996) and these interviewers conducted between 55 and 70 interviews, annually. Although no study of the reliability of individual interviewers was

conducted, an indication of on-site versus off-site reliability was examined. Spafford studied the UW admission interview scores between 1992 and 1996 (see Appendix Q for results). A statistically significant difference was found between the distributions of the on-site and off-site MIS, such that the on-site MIS were skewed towards better interview scores and the off-site MIS centered more towards average values. The distributions of the interviewer score difference (ISD) were also compared for the on-site and off-site interviews. There was a statistically significant difference between the distributions of on-site and off-site ISD: interviewer agreement (i.e., a smaller ISD) was greater for the off-site interviews than for the on-site interviews. Because the decision to interview contract applicants is based primarily on province of residence and only secondarily on academic performance, the statistical comparison of on-site with off-site interview scores was repeated but limited to including only applicants who were academically eligible (i.e., with OMs of at least 75%). The results were the same as for the comparison which included the entire interviewed applicant pool. The on-site versus off-site comparisons were made one final way by considering only applicants who were offered a place in the optometry program. Again, the on-site/off-site differences were found. This suggests it is not academic performance that differentiated on-site and off-site interviewed applicants. In fact, the difference between on-site and off-site interview scores likely reflected different interviewer scoring behavior rather than different interviewee performance.

The more centralized interview scores with greater interviewer agreement for off-site interviews suggests that the consistency of working together as an interview team over time influenced them to develop similar evaluation criteria. This interpretation is supported if the nature of the off-site interviewers' interactions is considered. Away from their colleagues and regular support network, they spend day after day with each other facing the challenges of trips to six cities. A possible outcome of this experience is that the interviewers form their own small group with a group identification and a "we-feeling" (Spencer, 1996, p. 114). Group identification is possible when there are two or more people present (Doise, 1978; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) and it has been shown to influence interviewers' ratings (Davis, Strube, & Cheng, 1995). The consistency among interviewers was less likely for the on-site interviewers who were part of the same interview team for no more than two or three interviews in a given year. The difference between on-site and off-site scoring behavior raises unanswered questions regarding whether these different scores affect admission decisions. In view of Spafford's study of early versus late admission decisions (Appendix P), where better interview scores may have made the difference in

receiving one of the last places in the class, the difference in interview scores made by the site location may have inadvertently affected the admission decision of some candidates. For example, what if the last offer of admission will go to one of two applicants: one was interviewed off-site while the other was interviewed on-site. If the applicants performed similarly on all other selection measures, then the interview score should determine who gets the offer. That is, the applicant with the better interview score will get the offer. If this is the case, then that offer will be given to the on-site applicant because they receive higher interview scores on average than off-site applicants. As a result, the potential for a bias for on-site over off-site applicants ensues because of interviewer scoring behavior rather than applicant performance. The Admission Committee do not consider the site of the interview or the identity of the interviewers. The Committee members accept the interview scores at face value. This potential 'site-bias' in the interview score needs to be considered by the Admission Committee.

Studies of the UW interview (Spafford, Appendix P; Q) support the participant's perception that it was used to select candidates, albeit less so than were transcripts and even less if the applicant's transcripts were outstanding. The different scoring behavior of the off-site interviewing team than the on-site interviewing teams likely would have confounded the use of the interview in selection decisions.

Participants in this study were fairly neutral about the ability of the UW interview to predict future performance. In an attempt to examine the predictive ability of some of the UW optometry selection tools, Spafford (see Appendix R for results) examined UW admission and optometry performance measures between 1992 and 1996 using Pearson correlation coefficients. The mean interview score was not statistically correlated to any of seven optometry performance measures: the four yearly optometry means, the overall optometry mean or the clinic course grade in third or fourth year. The interview's lack of correlation with academic and clinical performance was reported in an early study of the UW optometry interview (Spafford, 1994b) and in studies of other health care professional admission interviews (Bridle, 1987; Smith, 1991; Smith, Vivier, & Blain, 1986; Vargo, Madill & Davidson, 1986). The only studies that have reported a correlation between interview performance and clinical performance have intentionally designed the interview and the clinical program to evaluate similar features (Meredith, Dunlap & Baker, 1982; Walker, Killip, & Fuller, 1985). A correlation with academic performance has occurred only when interviewers were allowed to access the candidate's application (Powis, Neame, Bristow, & Murphy, 1988;

Spafford, 1994b). Spafford (Appendix R) also found a lack of correlation between the autobiographic sketch score and performance in the UW optometry program. The interview score, and possibly the autobiographic sketch score, were the most likely selection tools to correlate with clinical performance. The lack of correlation supports the theory that these admission variables were measuring different skills than the clinic grades. This does not mean that the interview could not predict any future performance, but rather that it could not predict performance directly gleaned from the optometry transcript.

By contrast, the admission overall mean (OM) correlated positively with all seven optometry performance measures while the OAT correlated positively with the first three yearly optometry means and the overall optometry mean (Spafford, Appendix R). The positive correlation found between the overall admission mean and the academic optometry measures was not surprising because both assessed largely cognitive skills, particularly basic knowledge. The positive correlation between academic admission performance and the clinic grades may seem somewhat surprising initially because the assessment of clinical performance would be expected to tap a wider array of performance domains, i.e., cognitive, psychomotor and affective. This correlation suggests that the UW method of evaluating clinical performance may be limited in its ability to assess these domains. Alternatively, the correlation may suggest that better academic performance translates some way into better clinical skill. This latter interpretation seems less likely in view of studies that show academic performance is less predictive of clinical performance as the student progresses through the program and enters practice (George, Young, & Metz, 1989; Gough & Hall, 1975; Murden, Galloway, Reid, & Colwill, 1978; Tarico, Altmaier, Smith, Franken, & Berbaum, 1986; Walker, Killip, & Fuller, 1985).

The two validity studies of the UW interview have shown its inability to predict optometry student performance using standard academic and clinic measures (Spafford, 1994b; Spafford, Appendix R). These findings are of particular interest when considered along with the participants' perception of the UW interview and the ideal interview. Interviewers and applicants were fairly neutral about the UW interview's ability to predict performance either as a student or as an optometrist. Whether it should be concluded that the UW interview's lack of predictive ability is a problem can not be addressed before considering two factors. First, participants were fairly neutral about whether an ideal interview should or could aim to predict performance. In the presence of this view, the UW interview's inability to predict performance may

not be a major problem. The other factor to consider is that the UW interview may predict certain aspects of performance but not those reflected by traditional academic and clinical grades. If this is the case, then a different tool for measuring performance would need to be developed.

Applicants believed that the UW interview assessed 'attitude orientation', 'team orientation' and 'managerial aptitude' type candidate traits significantly more than did the interviewers. These differences reflected the applicants greater optimism than interviewers about what the UW interview could evaluate. The agreement levels for these type of traits ranged from 'agree' to 'neutral' among applicants and from 'neutral to disagree' among interviewers. Interviewers seemed to suffer a crisis of confidence regarding what the UW interview could evaluate. Interviewers agreed the ideal interview should help clarify candidate information yet they disagreed that the UW interview served this function. It is argued that denying the interviewers access to the applications played a pivotal role in the interviewers' more negative view of the UW interview. Despite evidence that access results in interview scores that are correlated with the application rather than the interview, interviewers still wanted that information.

The group difference regarding the assessment of 'attitude orientation' in the UW interview is interesting in the presence of the greater desire on the part of the applicants than interviewers to evaluate 'attitude orientation' in the ideal interview. It is apparent that applicants really valued the assessment of 'attitude orientation'.

In summary, the UW interview was not used as a recruitment tool and it was unable to predict academic or clinical performance in the optometry program. As a selection tool, its relative overall weight in admission decisions was less than for the academic transcripts or the academically-biased autobiographic sketch score, although the interview's weight was not fixed. That is, the interview score held more weight for the latter admission decisions than for the initial admission decisions in the class. In addition, differing interviewer scoring behavior between on-site and off-site interviewers led to different interview scores that may have affected some admission decisions. The numerous significant group differences in the perceptions of the UW interview were seen as indicators of notable participant dissatisfaction with the UW interview. Applicants judged their UW interview experience largely based on the interviewers' behavior. By contrast, interviewers judged their experience based not only on their experience with the UW interview

but also on their reasons for participating in the interview process, their experience, if any, on the Admission Committee, and their experience with admitted students.

Ideal Interview versus UW Interview

There were numerous statistically significant differences between the participants' perceptions of the ideal interview and the UW interview. In 17 of the 21 significant differences, the UW interview failed to meet the participants' expectations of the ideal interview. Applicant experiences with the UW interview were significantly different than their expectations in four of the five purpose components (all but select/predict) and seven of the nine candidate trait components (all but the 'people skills' themes). Meanwhile, interviewer experiences significantly diverged from their expectations in two of the five purpose components (select/predict and clarify information) and eight of the nine candidate trait components (all but 'people skills'). In this thesis, it is argued that the more perceived incongruities there are between an interview and its 'ideal', then the lower is the interview's value according to its participants. This argument is supported by studies which have found that face validity is an important determinant of perceived fairness of selection tools such as the interview (Smither, Reilly, Millsap, Pearlman & Stoffey, 1993; Steiner & Gilliland, 1996).

One of the interesting findings of the perceived UW interview deficits is that applicants were more disillusioned with the purposes of the UW interview than the interviewers. Of note, all the significant UW/ideal interview differences perceived by the applicants pertained to purposes that would be greatly influenced by what the interviewer said and how the interviewer behaved. Certainly, the nature of the questions on the interview sheet would dictate to a certain extent what interviewers said, however the interview's semi-structured format would mean the range of questions asked and the topics covered could be large. In addition, the lack of interviewer training provided to UW interviewers would create a wider disparity in interviewer behavior. An indication of inconsistency in the content of the interview was apparent in one respondent's complaint. The interviewer wrote, "some interviewers go away from the questions on the sheet.". As postulated earlier, in the presence of a scarcity of information about the UW interview available to applicants, interviewer behavior would largely shape what applicants thought the UW interview was supposed to achieve. So the fact that, according to applicants, all the significant UW deficits in purposes were interviewer behavior dependent is seen as evidence supporting that postulate.

The UW deficit with respect to clarifying information was expected. The lack of access interviewers had to the candidate's application reflected a change in policy that occurred in the early 1990s after Spafford (1994b) found that interviewer scores tended to reflect the academic grades found in the written application rather than the interview performance when interviewers read the application. The results of Spafford's study were supported by other published work (Elam & Andrykowski, 1991; Litton-Hawes, MacLean, & Hines, 1976; Shaw, Martz, Lancaster, & Sade, 1995; Tarico, Altmaier, Smith, Franken & Berbaum, 1986).

Without access to the application, UW interviewers were unable to clarify candidate information in the application. Therefore it was not surprising that interviewers disagreed that the UW interview's purpose was to clarify candidate information. The greatest difference between the ideal interview and the UW interview occurred for clarifying information. As noted earlier, this perceived deficit in the UW interview is seen as pivotal to creating a lack of confidence in the UW interview's ability to assess desired traits and accomplish desired functions. Although candidates were expected to concur largely with interviewers, some uncertainty existed about their perception because interviewers were not required to notify the candidate at the beginning of the interview that they had had no access to the candidate's application. As a result, it was up to either the discretion of the interviewers to say something or the assertiveness of the candidate to inquire. In addition, it is the applicant pool not the interviewer pool who were likely to read the UW School of Optometry, Doctor of Optometry Program booklet for admission information. Candidates who did read it would see that one of the stated purposes of the UW interview was to clarify candidate information thereby creating a false expectation of the UW interview. Unfortunately, the change in policy had not been reflected yet in the booklet.

Unlike the on-site interviews, the same interview team performed all off-site interviews in a given year. In the past six years, the two admission officers had comprised the off-site interview team. The interviewers developed certain routines when interviewing. One of their routines was to indicate, at the beginning of the interview, the policy regarding not reviewing applications and the reasons for the policy. As a member of the off-site interview team for 12 years, I felt that many first-time interviewees appeared initially surprised and disappointed when they heard about this policy.

The belief held by many candidates that interviewers would be familiar with their application prior to the interview seems reasonable and is the likely result of several factors. Previous interview experience with applications for work or study may have created an expectation that their application would be available to the UW interviewers. UW optometry applicants also may have been influenced by reading the UW program admission booklet. Finally, applicants may have assumed that the reason they had received an interview was because of the strength of their application. If this was the case, it would be reasonable to assume the interviewers were familiar with their application. There is evidence for this last point in the survey. Applicant respondents believed that they were interviewed because of the strength of the academic (postsecondary transcripts and OAT scores) and non-academic (autobiographic sketch, references and essay) aspects of their application. This, in itself, is a partially inaccurate perception. In reality, only postsecondary transcripts were considered in the decision to offer on-site interviews. Even contract applicants, whose province of residence is the primary determinant of receiving an off-site interview, believed it was the strength of their application that determined the offer of an interview.

Applicants felt the UW interview was less geared toward recruiting them than they would have liked ideally. One candidate wrote, "Nobody makes you feel welcomed at UW or offered to show the candidate around.". This type of comment was echoed by two others, including one who wrote, "The impression I've gotten is, as the only English-speaking optometry program for Canadians, that Waterloo does not provide encouragement and information to reduce discomfort during [the] application process. I sensed a colder more rigid interview environment than others I've experienced". With only one English speaking School of Optometry in Canada and, on average, a 6:1 applicant to place ratio, UW has never been in the place of some programs who must recruit applicants to fill their program. In addition, the UW Optometry Admission Office consists of three individuals, none of whom work full-time on admissions, who are not available to provide tours. Several American optometry programs send prospective applicants videos about their program and one U.S. optometry program travels to the UW campus each year and holds an information and promotional meeting. In the presence of this type of promotion and recruitment on the part of numerous American optometry programs, the UW School appears to be perceived as less interested in its applicants.

Applicants were also disappointed in the UW interview's lack of emphasis on public relations. Statistical analysis revealed a significant deficit and the descriptive analysis supported a deficit in two of the contributing components: providing information to candidates and reducing their concerns. The agreement index revealed that providing information to candidates was important to candidates. The UW was not seen as providing this function as indicated both by the use of only a couple minutes at the end of the interview for candidates to ask questions and by applicant comments like, "Let the students know the role/importance of the interview. More information should be given regarding the interview so that students know how to prepare for it.". This concern was echoed by one of the optometry students who was interviewed during the preparation of the study questionnaire. The student indicated that the lack of information provided was a cause of additional and unnecessary stress in the UW admission process.

The finding of insufficient information gathering by the UW interview, according to applicants, might at first seem to be surprising in view of the structure of the UW interview being clearly geared toward asking questions of the applicant for almost the entire interview duration. However, candidates might still have believed the UW interview did not collect as much information as it should ideally if the 'wrong' kind of information was being gathered. The suggestion that different information was being collected from applicants than they wanted is supported by two findings. First, candidates believed the UW interview assessed seven of the nine candidate traits significantly different than they would have liked ideally. Secondly, numerous candidates (i.e., 11) indicated in their written comments that the focus of the UW interview questions should have been different. The types of concerns expressed by these candidates included: 1) "interviews should not ask specific optometry questions that will be taught in the program"; 2) "the [UW] interview should concentrate on items that are not reflected by their [the candidates'] GPA, OAT, and essay/references"; 3) "I was surprised that not one question was asked about myself"; and 4) "I may not get accepted to the [UW optometry] school because I didn't know specific optometry questions like the difference between the Optometrists Association and the College of Optometrists or if I knew the muscle reflex arcs of the eye muscles or exercises a goalie could do with his eyes to improve his/her performance. I don't think these questions reflect my potential or reveal anything about myself, my motivation or why I would be an excellent optometrist/student of optometry".

Interviewers perceived the UW interview as geared significantly less toward selection and prediction than they would have liked. The interviewers' extensive experience with the interview and, for many, their experience with the Admission Committee, seemed to have lowered their faith in the UW interview. It has been argued that the way many interviews are conducted, they become a search for negative rather than positive information (Webster, 1964). This kind of pessimism (or realism) existed among at least some of the interviewers. One interviewer wrote, "the interview can only hurt an applicant. Anyone who is not interviewed is assumed to be better than anyone who is interviewed poorly". Another wrote, "the [UW] interview works to predict who will fail as an optometrist and optometry student, rather than who will succeed". At the base of this crisis of confidence in the UW interview, lies the belief that interviewers should have been allowed to access the applicant's file.

Participants believed that the UW interview assessed most candidate traits significantly different than they would have liked ideally. In fact, 'people skills' seemed to be the only type of candidate trait that was assessed the 'right' amount. Both applicants and interviewers seemed satisfied with the emphasis placed on assessing 'people skills' such as energy level, presence and body language. Applicants were satisfied in the assessment of other 'people skills' such as communication skills and interpersonal skills and the 'management skill' of independent judgment. The small number of principal component themes that were statistically similar between the UW interview and the ideal interview underscored how incongruent the UW interview was with the participants' vision of the ideal interview. This is seen as another indication of a strong dissatisfaction with the UW interview.

Both groups agreed that the UW interview placed insufficient emphasis on the assessment of several types of traits (i.e., 'attitude orientation', 'team orientation', 'managerial aptitude', and manual dexterity). Some consideration on the part of the UW optometry faculty may be in order so that the format of the UW interview questions are revised. Such a need is further high-lighted by the two types of traits that the UW interview was seen to over-emphasize: 'professional' qualities and 'bias' type traits. The UW interview questions are clearly focused on assessing knowledge about the profession of optometry. While both groups agreed this was a desirable type of information to evaluate, they also agreed the UW interview over-emphasized these traits. This provides another indication to the UW optometry faculty of a way the UW interview could be changed. That is, the scope of the topics covered in the UW interview needs to be

broadened beyond that of basic knowledge. This problem is not unique to the UW optometry program. Admission interviews intended to evaluate the candidate's humanistic qualities but designed so that they evaluate cognitive skills such as knowledge are widespread among optometric, medical and dental programs (Johnson & Edwards, 1991; Myslinski & Jeffrey, 1985; Puryear & Lewis, 1981; Smith, Vivier, & Blain, 1986; Spafford, 1995).

The perceived over-emphasis on 'professional traits' may also indicate a concern among participants about the role 'professional' questions serve in the UW interview. Although participants believed that the purpose of the UW interview was to gather information and select candidates, they may not have believed that questions pertaining to professional traits should be used toward this end. When interviewers ask 'professional trait' type questions, it helps them ascertain whether candidates have a realistic idea of what optometry life is like. For example, interviewers would not want a candidate applying to optometry because they wanted to become an eye surgeon. By asking questions like, "What does an optometrist do?", the interviewers can learn whether the candidate is reasonably informed. Those who understand what the profession involves are more likely to 'fit in' with the optometry program and profession. Those candidates, who answer incorrectly, can be corrected by the interviewer. In this situation, the interviewer takes on the role of educator more than evaluator. Interestingly, providing the candidate with information was a highly valued purpose of the ideal interview. An additional advantage of asking 'professional trait' questions is that interviewers can gauge the candidate's level of knowledge as one indicator of the candidate's motivation. That is, a motivated and enthusiastic candidate will have taken the trouble to investigate the optometric program and profession. My experience in hundreds of UW interviews over the years substantiate this interpretation of interviewer behavior. That is, that the perceived over-emphasis on 'professional traits' may reflect at least in part, a misuse of these questions.

The perceived over-emphasis on 'bias' type traits is another potential problem with the UW interview about which the UW faculty may want to deliberate. Participants clearly agreed that the ideal interview should not be affected by 'bias' type traits, such as fashion, beauty, religion, race or visible disability. They were unsure that the UW interview avoided these biases. The UW optometry admission administrators may want to consider initiating interviewer training; an action which has been shown to help interviewers recognize and eliminate errors in information gathering and interpretation (Conway, Jako & Goodman,

1995; Howard & Ferris, 1996; Schuh, 1973; Wexley, Sanders, & Yukl, 1973). Interestingly, when asked whether participants were aware of incidents of ageism, beautyism, racism, sexism or homophobia in the UW interview, the statistical tests suggested that interviewers were more aware of such incidents than applicants. In part, this might be the result of the interviewers' greater experience than the applicants with the UW interview. As noted earlier in the literature review, the selection interview has been plagued with numerous forms of intolerance such as sexism, ablism, ageism, racism, etc., (e.g., McDonald & Hakel, 1985; Muchinsky & Harris, 1977; Rosen & Jerdee, 1974a; Rosen & Jerdee, 1976b; Scheuerle, Guilford & Garcia, 1982). Further study would be needed to really describe the types of intolerance that may exist with the UW interview. The bi-modal type distribution seen among interviewers on the topic of sexism in the UW interview provides an indication that the views of women and men may require future analysis. The sex break-down on the frequency distributions showed that it tended to be the female interviewers rather than the male interviewers who viewed the UW interview as sexist.

The benefit of knowing about the incongruities between the UW interview and the ideal interview is that they provide the UW optometry admission administrators and faculty with indications of ways in which the UW interview could be changed for the better in the minds of its participants. Making a move toward a more "user friendly" interview was desirable according to the vast majority of both applicants and interviewers (74.5% and 88.2%, respectively). Not only did a greater proportion of interviewers than applicants want the UW interview to change, the degree of change wanted by interviewers was greater than by applicants. Almost 59% of the interviewers wanted significant changes to the UW interview compared to just over 11% of the applicants. By contrast, over 63% of the applicants wanted only subtle changes to the UW interview and over 24% wanted the UW interview left unchanged. Equally interesting was that in the presence of so many perceived discrepancies between the UW interview and the ideal interview, only two respondents indicated they wanted the UW interview eliminated.

The reluctance on the part of many respondents to either eliminate or significantly revise the UW interview requires some consideration in the presence of an apparent widespread disillusionment with the UW interview. If one accepts the argument posed in this thesis that the admission interview has come to symbolize the means to assess highly valued humanistic skills, then it follows from there that participants would be unwilling to dispense with the UW interview despite their disappointment in it. That is, although

participants in this study found the UW interview to be notably lacking, their belief in the importance of evaluating humanistic skills through interviewing would make it almost impossible to advocate its elimination.

It is more difficult to explain the hesitancy, particularly on the part of candidates, to markedly change the UW interview. This reluctance can be rationalized two ways. For example, many participants might have believed that the 'ideal interview' could not be realized or at least not at the UW School of Optometry. That is, the ideal interview may represent what they would like to see happen but not what they thought ever could happen. In this case, there would be little to be gained by changing the UW interview. Alternatively, the reluctance to change the UW interview may have reflected a concern about what form the change might take. Although various options for change were posed, participants had to indicate their opinion regarding the level of change desired in the UW interview without knowing how exactly it might change. A fear that the UW interview could take a less desirable form would fit the analogy of "better the devil you know than the one you don't". It is also possible, that the applicants distrusted the guaranteed confidentiality of the study and if they could be identified they would rather be seen as constructive than destructive in their attitudes toward the UW interview.

An interesting outcome of the recommendation for the future of the UW interview was that the bulk of the interviewers sought significant change while the bulk of the applicants sought subtle or no change. The amount of experience with the UW interview is seen as an important determinant of this group difference. Interviewers had more experience with the UW interview than the applicants. On average, applicants had been interviewed once, while on average, faculty had interviewed at least eight candidates annually, with the majority of the faculty having been at UW for well over 10 years. With more exposure to the UW interview and more information about the content and use of the interview, interviewers would be less optimistic about it and more in favor of significant change. The types of changes called for by the interviewers were intriguing in that they pertained to the interviewer's role. Who better than the interviewers to be aware of the need for interviewer training or the need to change the question style and content?

In summary, the UW interview experience diverged significantly from the participants' expectations of the ideal interview. The disappointment in the UW interview was most evident among applicants who resented the lack of information they received about the UW interview and the admission process. The inability of the UW interview to clarify application information was seen as the most notable deficiency in the minds of the participants, in particular the interviewers. Despite evidence that access to an application results in the interview score reflecting the application rather than the interview, the lack of access created a crisis of confidence in the UW interview. The knowledge-based UW interview was seen as too limiting in its ability to adequately assess numerous candidate traits (e.g., 'attitude orientation' 'team orientation', and 'managerial aptitude'). Despite widespread perceived deficiencies in the UW interview however, the support for continuing with the UW interview was strong, particularly among applicants.

Ideal Interview versus Ideal Committee

Statistically significant differences between the ideal interview and the ideal admission committee were more numerous among applicants than interviewers (6 versus 2), although not all these differences were felt to be relevant to this study. The focus of the study was the congruity or lack thereof between the perceptions of the UW interview and the ideal interview. Consideration of the ideal admission committee was felt to be relevant in situations where the UW interview and the ideal interview had been found to be significantly different. For example, both interviewers and applicants perceived 'professional' traits were evaluated significantly more by the UW interview than they should be by the ideal interview. The question remained whether the over-emphasis on this trait was a problem because of its importance in the UW interview or its importance in the admission process in general. If agreement was significantly higher with assessing the trait with the UW interview and the ideal admission committee than with the ideal interview, then the trait was perceived as worth assessing but not with an interview. Alternatively, if the trait was not viewed significantly different in terms of the ideal interview and the ideal committee, then the trait was over-emphasized in terms of any selection tool used by the ideal admission committee.

With this logic in mind, the items most relevant to the discussion were those where agreement levels for the ideal interview were significantly higher (or lower) than for both the UW interview and the ideal admission committee. A review of the data revealed no such example. This was interpreted as an indication that the noted under- and over-emphasized UW interview features were relevant to the

participants' view of the ideal interview and the ideal interview fit into their global view of the ideal admission process.

Possible Limitations to the Study

Response rates to mail surveys as low as 10% are possible (Moser & Kalton, 1971). The response to this study's survey of 71.7% was considered reasonably robust. There are several factors that may have raised the response rate, including: 1) the use of stamped, addressed return envelopes, 2) the use of reminder letters, 3) my relationship to the respondents, and 4) the topic of the survey (Moser & Kalton, 1971). These last two points deserve further consideration and they point to the unknown motivation for completing the survey. Although, an obvious explanation would be that respondents had an interest in the topic, there may have been other motivating factors for participating.

As a colleague of the interviewers, my professional relationship with them may have influenced their high response rate (87.0%). All the interviewers were aware of my pursuit of a PhD and many had made supportive comments about that goal. Completing the survey may have felt like one way to be supportive. In addition, most of the interviewers had daily or weekly contact with me in a variety of professional activities (not necessarily related to admissions). The frequent contact may have served as a reminder to complete the survey.

During the 12 years I served as an Admission Officer at the UW School of Optometry, there were many occasions when interviewers shared their opinions in and out of meetings about the strengths and limitations of the UW interview and interviewing in general. These opinions were rarely neutral. The interview and, perhaps, the pre-requisite courses were the most frequently discussed UW selection tools.

A decreasing faculty complement in the past few years and subsequent increased work loads coincides with a greater resistance to providing interviews. With increased demands on their time, the faculty may have begun to more seriously contemplate cost/benefit issues related to these demands. Under stress, the faculty would be less supportive of performing tasks they perceived were not helpful to themselves or to the School. Support for this view became evident in discussion with the staff who approached faculty to interview. In the past few years, resistance to interview had increased. Fewer interviews were being

offered by a number of the faculty. In the past few years, the Director of the School had sent a memo to faculty reminding them of their responsibility to provide this service in order to increase cooperation with the interview process. Another indication of the concern about participating in the interview process was evident in one faculty member's written comments on the survey, "Consideration should be given to the costs involved in the Admissions process and the returns for such costs". The timing of the survey may have provided a useful place to vent opinions about the UW interview.

The return rate for the applicants (69.4%) was lower than for the interviewers. The personal connection I had with the interviewers was not there with the applicants. Having said this, I would likely have directly interacted with about 100 of the 157 potential respondents through admission interviews or appointments to discuss aspects of the candidate's application. It is highly probable that the applicants recognized my name on the questionnaire's letter of information sheet as being that of a UW Admission Officer. The impact of this realization on the response rate is hard to predict. For example, the strong return rate by applicants may have been related to their perceptions of how responding to the survey might impact on their application. Respondents were assured their responses to the survey would be anonymous, confidential and that participation would not be a factor in their application to the UW optometry program. Despite this assurance in the letter of information, candidates may not have wanted to take the chance that non-response might have had a deleterious effect on their application. The letter of information did include an explanation of the numbered return envelopes used to reduce reminder mailings, yet the possibility of being tracked (albeit not by me) may have been perceived as a threat to that anonymity.

All the surveys were mailed to respondents prior to the admission meeting during which their applications were considered. Most of the returned surveys arrived prior to the applicants knowing the outcome of their application to the UW optometry program; however, some applicants (estimated to be less than 10%) may have known their decision before completing the survey. If they had been offered a place in the optometry program, their perception of their UW interview may have been more positive than if they had been refused a place. This potential bias in the responses and the response rate could have been avoided if interviewees were asked to complete the questionnaire immediately after the interview (this strategy would have also meant that responses would have reflected their immediate opinions not those developed over time and after discussions with others). This strategy was not adopted for two reasons.

First, I was concerned that applicants might have had an even more difficult time refusing to participate if they were approached in person. They might have also felt that the chances of their anonymity being maintained was lower and the potential impact on their application higher than with the method adopted in this study. Secondly, it would have been difficult to administer the survey after the on-site interview and virtually impossible after the off-site interviews (where there was no support staff to administer the surveys and no space in which applicants could complete the surveys).

Another reason for the strong return rate from the applicants may have been that they, like the interviewers, had strong opinions about the interview that the survey allowed them to convey. Certainly many applicants over the years have expressed strong opinions about the UW interview. Virtually all who have shared the opinions have favored the use of interviews in the UW optometry admission process although the perceptions of the UW interview's quality have been mixed. As Admission Officer, I had received mostly negative comments from applicants about their experiences in the UW interview. That is, applicants who enjoyed their interview experience seldom took the time to indicate their positive experience.

A factor that likely limited the return rate was the length of the survey (Moser & Kalton, 1971). The survey, with over 150 items, was quite long. It was estimated to take approximately 20 minutes to complete. Some respondents commented that the time estimate was reasonable although others disagreed. One respondent indicated that the survey had taken 40 minutes to complete. The reasons for non-response are unknown and this can be both problematic and a source of bias in the results (Moser & Kalton, 1971). Non-responders may have been uninterested in the topic, too busy, too concerned about revealing their identity or influenced by receiving an offer or a refusal to the UW optometry program. No doubt there are other reasons for non-response. For instance, one questionnaire was returned by the parent of an applicant. The parent indicated in a separate letter that the applicant would have liked to have participated in the study but the applicant was out of the country for the summer. Although it is possible that the respondents provided a biased sample, the robust return rate provides support that the respondents reflected the target population reasonably well.

In retrospect, one way the length of the survey could have been reduced would have been to eliminate the items pertaining to the ideal admission committee. There were 42 such items (a notable portion of the survey). The attitudes toward the ideal admission committee were not the focus of the study and they were intended to serve more as a context for significant differences between the ideal interview and the UW interview. The inclusion of these 42 items substantially lengthened the survey without adding a lot to the findings. Not only was the length a potential cause of non-response but the inclusion of three contexts (i.e., UW interview, ideal interview, ideal committee) provided confusion for some respondents. One respondent wrote, "Questions are too similar --- becomes confusing". Another respondent wrote, "Section V and Section VI were very similar". These sections represented opinions about the ideal admission committee and the ideal interview, respectively. If the survey items had been restricted to opinions about the UW and ideal interviews, the confusion and frustration level of respondents might have lowered and the response rate might have increased. Despite this concern, several respondents commented positively about the design and thoroughness of the survey. For example, one respondent wrote, "The questionnaire was well designed and was all encompassing".

The small size of the interviewer population (i.e., N = 23) provided a possible limitation in analyzing the group's results. Although the proportion of the pool that responded (87%) made the respondents fairly representative of the group, the small 'n' value (i.e., 20) affected the selection of certain statistical tests and lowered the confidence in the findings.

The frequency distribution of responses to most survey items was either normal or skewed strongly to an extreme level of agreement. There were, however, a few instances where the frequency distribution approached a bi-modal distribution. Interestingly, each of the five cases of a bi-modal type distribution occurred with the interviewer group. With a larger number of respondents, it would be possible to investigate the nature of any bi-modal responses.

As presented in the previous chapter, the response pattern to the questions regarding the presence of sexism in the UW interview was bi-modal. Further analysis suggested that female interviewers made up the majority of respondents who agreed that sexist incidents occurred in the UW interview (67% of the women versus 14% of the men believed the UW interview was sexist). A study of faculty attitudes

towards gender issues and definitions of sexism would be an interesting study to pursue. In view of the literature on sexism in the selection interview (reviewed in Chapter 2), this finding is not surprising. What was more surprising was the lack of a gender polarization among the applicant responses to this survey item.

Three of the bi-modal distributions referred to promoting the program and recruiting candidates with the ideal interview or recruiting candidates with the UW interview. In the United States, where optometry applicant to place ratios are considerably lower than in Canada, the desire to market the program and recruit candidates is strong. As noted earlier, the use of promotional videos, visits to other campuses and provision of formal tours by some of the optometry programs in the U.S. made the UW optometry program look rather uninterested in their applicants. The UW School of Optometry has never had a formal policy of promotion and recruitment. Tours are not given to interviewees, partly because of a small number of personnel in the UW optometry Admission Office. The School's applicant to place ratio of approximately 6 to 1 (i.e., initial applicants to admitted applicants), the majority of whom are eligible for admission consideration, has provided no impetus to recruit. Interestingly, however, the interviewer group held a mixed opinion of whether recruitment (6 agree, 3 neutral, and 11 disagree) and promotion (9 agree, 3 neutral, & 8 disagree) would be a desirable purpose of the ideal interview or an existing purpose of the UW interview (7 agree, 2 neutral, & 11 disagree). It would be interesting to pursue an investigation of what some faculty intended by supporting candidate recruitment and promotion of the program.

The one other bi-modal distribution pertained to opinions regarding whether the UW interview assessed visible disabilities (8 agree, 3 neutral & 9 disagree). Although the interviewers believed that the other four 'bias'-type traits were not a factor in the UW interview, there was mixed opinion regarding candidates with visible disabilities. Specific types of visible disabilities were not investigated in the study although the glossary section in the survey gave the following examples for visible disability: limb amputation, facial scarring, and wheelchair bound. One possibility, other than outright ableism to explain some of these results could be a concern on the part of the interviewers as to whether the person with certain visible conditions (e.g., arm amputation) would be able to perform the tasks necessary to practise optometry. Further study would be required to ascertain the nature of this mixed opinion.

The use of a 5-choice Likert type scale in the survey provides another possible limitation to the study. Respondents were asked to indicate their level of agreement with a series of statements by circling one of five letters representing: strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. A potential problem arose with this method because in the minds of respondents, the distance between scale positions is unknown. That is, the 'distance' between 'neutral' and 'agree' may not have been the same as the distance between 'agree' and 'strongly agree'. Despite the use of an ordinal scale, the descriptive analysis and statistical analysis was predicated on assigning equidistant numerical values to each of the five letter choices. From a purely statistical view, the assignment of numerical values to categorical data is invalid because the ordinal type scale was treated as if it was an interval type scale. Notwithstanding this concern, the design of the survey and the subsequent analyses are commonplace in Likert style scales (Moser & Kalton, 1971). Regardless of this concern, the consistent use of the scaling throughout the study, still provided a strong indication of the group differences and the differences between the admission contexts. The limitation may occur in trying to quantify the level of agreement.

An alternate approach would have entailed providing for each item a horizontal scale that was marked only with the extreme agreement levels at each end and the neutral point in the middle. The respondent would have indicated his/her agreement level by creating a hatch mark on the scale. By measuring the position of the hatch mark, an indication of the agreement level could have been determined. These values would have been derived from a continuous scale which would have made the application of statistical analysis unquestionably appropriate. One reason that this method was not chosen, however, was that the error of central tendency, which is common among respondents (Moser & Kalton, 1971), was deemed to be more likely to occur with the use of a straight line scale.

A final limitation of this study's findings is that the data were obtained from one optometry program. The data may not be generalizable to other optometry programs or other healthcare programs. This is a potential concern of any case study approach. However, the benefits of studying a program in-depth outweighed this limitation in my opinion. In fact, the uniqueness of individual admission policies and program cultures made a case study process the logical approach. The description of the UW optometry program that was provided gives the reader a solid basis for making comparisons with other programs.

Conclusions

Based on the results of this study, several conclusions are indicated:

1. Applicants and interviewers shared a common vision of the ideal optometry admission interview. The purpose of the ideal interview is to gather information from the candidates, clarify information in the applications, provide information to the candidates, and select the candidates by appraising their 'people skills', 'professional' and 'attitude orientation' type traits.

2. The shared vision of the ideal interview suggested that it may be possible to design an interview that would satisfy the agendas of both groups. A shared vision is argued to be a major contributor to participants believing in the worthwhile nature of the interview. The interview held the same meaning for both interviewers and applicants: it was the tool believed vital to the evaluation of certain non-cognitive qualities. The meaning that participants attached to 'the interview' could be interpreted within the framework of a symbolic interactionist approach.

3. Participants agreed about certain features of the UW interview, i.e., it was geared toward gathering information from candidates and selecting them by appraising mostly their 'professional' traits and, to a limited extent, certain aspects of their 'people skills' and 'attitude orientation'.

4. The weight of the UW interview used to select candidates is lower than that attached to academic transcript performance. The weight of the interview in admission decisions is significantly greater toward the end of the admission meeting than at the beginning.

5. Applicants and interviewers held significantly different views of the UW interview's purpose and content. This incongruity was interpreted as an indication of their dissatisfaction with the UW interview as well as an indication of the failure of the UW School of Optometry's Admission Office to communicate clear guidelines to the interview participants.

6. The description of the UW interview in the UW Doctor of Optometry Program booklet was misleading. The booklet indicated the purpose of the UW interview was to predict future performance and clarify

information found in the application, however participant views of the UW interview were neutral about the former purpose and in disagreement with the latter purpose. Further evidence of the misleading nature of the description, albeit unintentional, was the finding that: 1) clarifying information in the application was impossible because interviewers were not allowed access to the applications, and 2) correlation studies of admission data between 1992 and 1996 found the UW interview was unable to predict either academic or clinical performance in the UW optometry program.

7. The inability of the UW interview to predict performance in the program should not be used as justification for its elimination as participants were not convinced that the ideal interview should try to serve this function.

8. The UW interview deviated significantly from the ideal interview according to the respondents in this study. The major determinant of applicant perceptions of the UW interview's purpose appeared to be the interviewers' behavior. In contrast, the major determinants of the interviewer perceptions appeared to be their knowledge of the UW interview questions, the UW admission process and student performance in the UW optometry program.

9. The UW interview was perceived as significantly over-emphasizing the assessment of 'professional' traits and 'bias' traits, while significantly under-emphasizing the assessment of 'attitude orientation', 'team orientation', 'managerial aptitude', and 'manual dexterity'.

10. The greatest perceived difference between the UW interview and the ideal interview regarded clarifying candidate information. The inability of the UW interview to provide this function in the presence of a strong desire to do so was interpreted as a major determinant in creating a crisis of confidence in the UW interview. Access to the applicant's file, despite its inherit risks, was highly valued. Without it, participants likely questioned the interview's validity.

11. Despite the significant perceived short-comings of the UW interview, the longevity of the UW interview continues because of the meaning that participants have attached to their vision of an ideal interview.

The ideal interview is seen as a vital step in trying to identify those who display humanistic qualities that are highly valued traits in optometrists.

Future Directions of Study

There are several questions that would be interesting to address as a result of this study.

A question not addressed in this study was whether participants believe an 'ideal interview' is an obtainable entity. It is possible that individuals could describe the qualities they would like associated with an ideal interview but are somewhat cynical about whether such a goal is obtainable. A study should be pursued which asks, "Is the ideal interview obtainable?"

Participants in this study highly valued selection but not necessarily prediction as a goal of the ideal interview. Selection is presumably about identifying those who possess positive qualities and lack negative qualities considered relevant to the practise of the profession. Why then is prediction not an expressed goal? It is as if the participants are myopic in their goals of the interview. They view the purpose of the interview only in terms of the short-term goal (i.e., to select 'good' applicants and exclude 'bad' applicants) yet there is no thought to the longer term goal of predicting future performance. In view of the results of this study, the logical way to explain this disparity is to assume that the purpose of the interview is not one of inclusion but rather one of exclusion. That is, its purpose is to eliminate the unsuitable candidates from the applicant pool rather than to select the suitable candidates. This notion has been supported both in the literature and by some of the respondent comments. If this is the case then presumably the assumption is made that the admitted candidates are all suitable. With a largely homogeneous group of admitted applicants, the task of predicting who among these impressive candidates will be outstanding in the program or in practice becomes a very difficult task requiring a finely tuned selection tool. It is unlikely that the participants viewed the UW interview as a finely tuned device. Further investigation is needed to test the hypothesis that the UW interview is a tool of exclusion rather than one of inclusion.

Applicants significantly valued the assessment of 'attitude orientation' more than interviewers. This difference applied to all three contexts: the UW interview, the ideal interview and the ideal admission

committee. It was postulated that applicants value 'attitude orientation' more than interviewers because applicants believe they must convince interviewers that they want a position more and want to work more than other applicants. This belief in the importance of showing effort may in fact be a long established behavior among students. That is, students throughout their school years are constantly given feedback about effort and may come to value it more than the outcome at times. Further investigation should be pursued to determine if the preference for 'attitude orientation' is a conditioned student response or a quality that applicants actually believe translates into better optometric practitioners.

Despite the tremendous incongruity between the UW interview and the ideal interview, participants, in particular applicants, were not keen to eliminate this selection tool. An investigation should be pursued that examines the imbalance between the perceived flaws of the UW interview and its recommended future.

A high proportion of applicants admitted between 1992 and 1996 (65%, on average) had one of the top autobiographic sketch scores (ABS) in the applicant pool (Appendix P). A comparison of the four ABS component scores (i.e., awards, special training, volunteer work and extracurricular activities) should be pursued to test the hypothesis that this surprisingly high proportion of admits for a 'non-academic' selection tool results from the 'academic bias' created in the academic awards component.

Faculty held widely divergent views about recruitment and promotion as a part of the admission interview. An examination of faculty opinion should be pursued that taps into what faculty members mean by these terms and how they see these functions affecting the UW admission process.

Further study of the potentially sexist nature of the UW interview seems appropriate. Female interviewers tended to view the UW interview as sexist while male interviewers were less inclined toward this view. Another indication that men and women experienced the UW interview differently involved some significant differences between the perceptions of women and men applying to the UW optometry program. For example, women felt that the UW interview was less geared to recruiting them then they would have liked ideally. By contrast, the men did not share this disappointment. Based on my personal experiences at the UW School of Optometry (as a UW interviewer, a UW faculty member, a former

Admission Officer, a former UW graduate student and a former UW optometry student) and based on sharing experiences with others at UW, I was surprised there were not more differences in perceptions between the women and men. Although the number of women and men admitted to the UW optometry program has more or less equalized in the last few years, my sense is that their experiences of the program differ widely. An analysis of the gender differences found in this study is currently being pursued.

The question remains regarding the applicability of this case study's findings to other optometry programs or other healthcare professional programs. A case study approach was adopted because I (and others) regard the UW optometry program and admission process as reasonably unique. A next logical step is to test that theory and address the question of how generalizable are the findings of this study.

Personal Reflections on the Findings of this Thesis

The selection interview remains an enigma. The interview is seen as an important selection tool yet its predictive abilities are neither sought nor evident. It is seen as a tool to evaluate humanistic qualities yet it is designed to evaluate mostly cognitive skills. In the case of the UW interview, it is perceived to be deficient both in purpose and content yet its continued inclusion in the selection process is strongly supported.

Despite all the evidence to the contrary, I, too, support the continued provision of an interview at the UW School of Optometry. With the information from both this study and others however, the UW interview can be revisited with a new awareness on the part of the program administrators. For example, the strong desire to provide information to candidates could be addressed either by modifying the current admission literature or providing an exit interview after the selection interview. The costs of the latter endeavor would need to factor into the decision to pursue that option.

Inescapable in this study's findings is the strong desire to evaluate humanistic skills such as personal attitudes, attributes and communication. This desire is evident in studies that have sought to identify positive and negative qualities of physicians (e.g., Powis, 1994; Price, Lewis, Loughmiller, Nelson, Murray, & Taylor, 1971; Sade, Stroud, Levine, & Fleming, 1985). I believe the wish to evaluate these elements of candidates is so strong that I and many others will hold onto the idea of the healthcare admission

interview, despite all of the evidence to support its elimination. Perhaps it is germane to this persistence that all of us at some point seek the advice of healthcare practitioners. In those interactions, we depend not only on their knowledge base, their technical ability, and their analytical skill, but also on their interpersonal skills such as empathy, compassion and tolerance. Participants may not know how to select for humane practitioners or if such behavior can be trained but their desire to have it is steadfast. The interview appears to be perceived as the logical option in the pursuit of this goal.

The missing step in the current UW optometry admission process is typical of most admission processes: the selection instruments have not been carefully considered in terms of their purpose or design. The purpose of the UW interview needs to be clearly articulated and communicated to the relevant parties. Interviewer training would help to improve the reliability, increase the validity and restore the image of the UW interview in the minds of the participants. The feasibility of interviewer training would need to be assessed in terms of the financial and human resource costs particularly as the cost of the present interview is already substantial (see Appendix S for a break-down of the UW interview cost which is estimated to exceed $20,000Cn, annually). The limitations of the interview need to be identified, understood and communicated. A cost/benefit analysis of allowing interviewers to access the applicant's file should be pursued. Further study of what role participants believe this access serves is necessary.

The UW optometry interview needs revisions to approach the goals of an ideal interview. This study provides useful information to program administrators regarding ways they might change the UW interview. Whether the design of the UW interview is altered or not, issues of public relations should be addressed. Currently, the UW interview is a misunderstood aspect of the selection process.

Despite concerns with the UW interview, support for this 25-year-old selection tool is strong on the part of both interviewers and applicants. The question is not whether the UW interview will continue. With such a strong foundation of support, the longevity of the UW interview appears assured. Perhaps the unanswered question pertains to whether the program administrators would consider modifications to the UW interview that would enable it to better meet the needs of its participants.

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Appendix A: Optometry Student University Background

Table A.1: Total Number of Postsecondary Education Years

	1992	1993	1994	1995	1996
Mean	2.9	3.3	3.0	3.1	3.1
Median	3.0	3.0	3.0	3.0	3.0
Standard Deviation	1.2	1.3	1.1	1.1	1.0
Maximum	5	7	6	6	5
Minimum	2	2	1	2	2

Table A.2: Total Number of Postsecondary Science Years

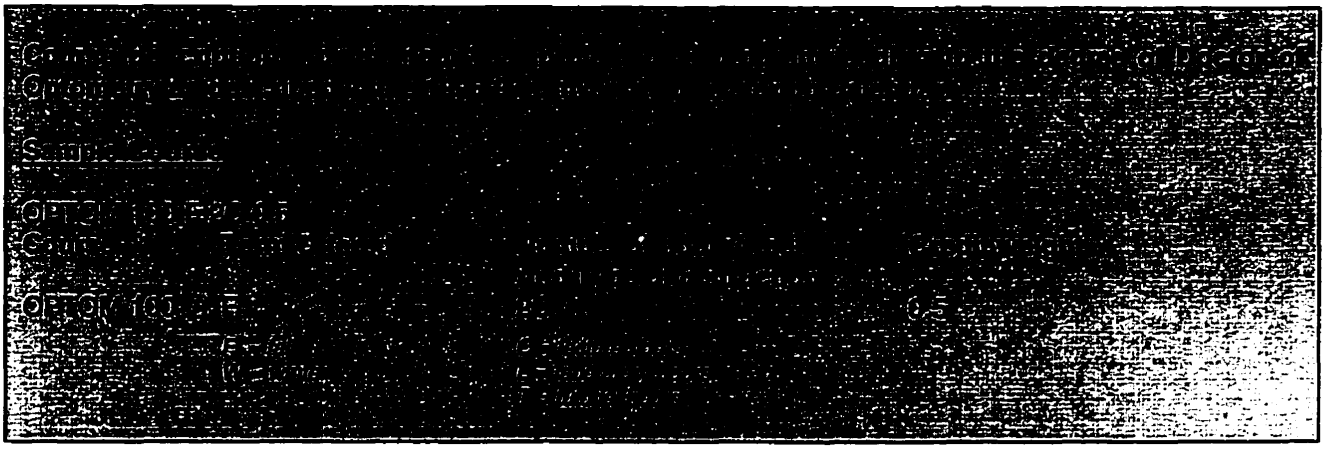
	1992	1993	1994	1995	1996
Mean	2.7	3.0	2.9	2.8	3.1
Median	2.0	3.0	2.0	3.0	3.0
Standard Deviation	1.0	1.1	1.2	1.0	1.0
Maximum	6	6	6	6.0	5
Minimum	1	1	1	0	2

Table A.3: Percent of Entering Class Having Obtained a University Degree

	1992	1993	1994	1995	1996
BSc Degree*	21.6%	23.3%	20.0%	16.6%	26.6%
All Other Degrees*	1.6%	5.0%	10.0%	3.3%	26.6%

*N.B. The number of degrees is likely higher. These statistics reflect only those degrees printed on the transcript (at some institutions, the degree is not printed until after convocation and the transcript may have been generated prior to convocation).

Appendix B: UW Doctor of Optometry Course Descriptions



YEAR ONE

OPTOM 100 F 2C 0.5History and Orientation
A brief history of the profession and the development of visual science; a consideration of legal and organizational development of optometry; the role of professional associations. The role and scope of optometry and its relationship to other professions and the community.

OPTOM 104 F 3C,3L 0.5
Anatomy of the Eye 1
The gross, microscopic and ultra structure of ocular tissues. The embryology and comparative anatomy of the eye will be emphasized. The relationship of the eye to the vascular supply of the head and the nervous system will be studied. This course is credited only upon completion of OPTOM 114.

OPTOM 105 F 3C,1T 0.5
General Pathology 1
Basic disease processes, including inflammation, degeneration, neoplasia; pathogenic microbiology and related diseases; immunity and hypersensitivity; disease caused by physical agents; diseases of the organ systems.

OPTOM 106 F 3C,3L,2T 0.5
Geometrical Optics
Reflection and refraction. Image formation. Optical properties of plane and curved surfaces, prisms and thin lenses. Thick lens theory and lens systems. Ray construction. Optical and ophthalmic instruments.
Prereq: PHYS 121/121L, 122/122L, or equivalent, MATH 107/108 or equivalent.

OPTOM 109 F 3C,3L 0.5
Visual Perception 1: Perception of Light
Sensory processes involved in visual perception. Topics include spectral sensitivity, light and dark adaptation, temporal and spatial resolution, and principles of photometry.

OPTOM 111 W 3C,3L 0.5
Fundamentals of Visual Optics
The eye as an optical instrument. Ametropia and emmetropia. The refracting mechanism. The stimulus to accommodation. Ocular transmission. Visual acuity and visual performance; stray light in the eye; analysis of the retinal stimulus pattern.
Prereq: OPTOM 106

OPTOM 114 W 3C,2L 0.5
Anatomy of the Eye 2
A continuation of OPTOM 104
Prereq: OPTOM 104

OPTOM 115 W 4C,1T 0.5
General Pathology 2
A continuation of 105.
Prereq: OPTOM 105

OPTOM 119 W 2C,2L 0.5
Visual Perception 2: Colour Vision
An introduction to colour perception, colorimetry and colour discrimination. Characteristics of congenital and acquired colour vision deficiencies, colour vision test design and patient management.
Prereq: OPTOM 109

PHYS 246 W 2C,2T 0.5
Physical Optics
Nature of light, wave motion, superposition of waves, interference of light, Fraunhofer diffraction and resolution limit of optical instruments; the diffraction grating and the analysis of light. Fresnel diffraction. Polarized light. Coherence of light, lasers, holography. Fibre Optics.
Prereq: First year physics and calculus

BIOL 301A/B F/W 3C,3L 0.5/0.5
Human Physiology
The physiology of the major organ systems of the body. The topics discussed include circulation, respiration, digestion and nutrition, metabolism, muscle, nervous systems, special senses, and the endocrine system.

YEAR TWO

OPTOM 216 F 3C,4L 0.5
Ophthalmic Optics 1
Properties of single vision spherical, cylindrical and toric lenses. Optics of prisms and lens combinations. Properties of ophthalmic lens materials. Absorptive lenses. Field of view. Magnification effects of thin lenses. Ophthalmic laboratory procedures.
Prereq: PHYS 246, OPTOM 106

OPTOM 241 F 3C,3L 0.5
Ocular Motility
Ocular motility; kinematics of eye movements, muscle actions, measurements of eye movements, types of eye movements, innervational systems subserving eye movements, clinical applications.
Prereq: OPTOM 111

OPTOM 242 F 3C,3L 0.5
Clinical Techniques 1
Clinical techniques for the primary care examination of the optical properties and ocular health of the eye. Case history taking. Medical emergency responses. Professional boundaries.
Prereq: OPTOM 111

OPTOM 244 W 3C,2L 0.5
Neurophysiology of Vision
The neural processing of colour, brightness, movement and form by the retina, lateral geniculate, cortex, superior colliculus and other brain centres. Neural mechanisms underlying binocular depth perception, the accommodative response and eye movement.
Prereq: OPTOM 104/114

OPTOM 245 F 3C,2L 0.5
Ocular Pathology 1
Etiology, signs, symptoms, diagnosis, management, and epidemiology of diseases of the ocular adnexa and anterior segment of the eye; ocular emergencies; primary health care responsibilities.
Prereq: OPTOM 105/115

OPTOM 246 W 3C,4L 0.5Ophthalmic Optics 2 Optics and design of bifocal and multifocal lenses. Aberrations of thin lenses. Trigonometric ray tracing and design of best performance lenses. Lenses for aphakia. Optics of rigid contact lenses. Protective lenses. Prescription standards. Ophthalmic laboratory procedures.
Prereq: OPTOM 106/216

OPTOM 251 W 3C,3L 0.5
Visual Perception 3: Monocular and Binocular Visual Processes
Physical space and visual space. Fundamental perceptual processes, binocular vision, stereopsis, binocular space perception. Systems of analysing binocular vision. Theory of aniseikonia. Perceptual aspects of aniseikonia.
Prereq: OPTOM 109, 241

OPTOM 252 W 3C,3L 0.5
Clinical Techniques 2
Clinical techniques for the detection of strabismus and the assessment of the nonstrabismus state. Assessment of ocular misalignments, motor reserves, and accommodative function with particular emphasis on the relationship between accommodation and convergence. Differential diagnosis of conditions including vertical imbalance, vergence imbalance and amblyopia.
Prereq: OPTOM 241/242

OPTOM 254 F 2C,2L 0.5
Physiology of the Eye
The physiology of the smooth muscles of the eye, the extraocular striate muscles, the lacrimal apparatus, the cornea, the iris, the lens, the ciliary body and the vitreous body. Production and drainage of aqueous and related influences on intraocular pressure. The vascular supply of the eye.
Prereq: OPTOM 104/114

OPTOM 255 W 3C,2L 0.5
Ocular Pathology 2
Etiology, signs, symptoms, diagnosis, management, and epidemiology of diseases of the posterior segment of the eye; higher visual and oculomotor systems; multisystem diseases.
Prereq: OPTOM 245

OPTOM 264 F 3C 0.5
Pharmacology 1: Medications and the Eye
Coverage of the principles of pharmacology (pharmaceuticals, pharmacokinetics, and pharmacodynamics), drug classification and mechanism of action. Medication use by the population; coverage of medications used to manage most major diseases and consideration of the effects of these medications on the eye and vision.

YEAR THREE

OPTOM 342 W 3C,2L 0.5
Case Analysis and Optometric Therapies
The clinical application of the visual sciences. Emphasis is placed on the differential diagnostic method of analyzing clinical data with consideration given to appropriate clinical techniques, effective record keeping, recommended optometric therapies and prognoses.
Prereq: OPTOM 352

OPTOM 346A F 2C,2L 0.5
Ophthalmic Optics 3
Spectacle frame materials. Fitting and adjusting techniques. Selection of lens design. Lenses for high myopia. Dispensing of eye protectors. Optics of low vision aids. Patient counselling and management of dispensing problems. Laboratories provide experience in practical aspects of ophthalmic dispensing.
Prereq: OPTOM 216, 246

OPTOM 346B W 2L 0.0
Ophthalmic Optics 3
Continuation of 346A. Laboratories provide experience in practical aspects of ophthalmic dispensing.
Prereq: OPTOM 216, 246

OPTOM 347 F 3C,3L 0.5
Contact Lenses 1
Patient examination and consultation. Indications and contra-indications for contact lens wear. Factors influencing lens selection and design. Principles of fitting and evaluating rigid and hydrogel soft contact lenses. Physico-chemical and mechanical properties of contact lens materials. Optical and mathematical concepts. The ocular physiological response to contact lens wear. Care and maintenance of contact lenses.
Prereq: OPTOM 246, 252, 254

OPTOM 348A/B F,W 1C,8 each Clinic 1.0 each
Optometry Clinics
Students are assigned to various areas within the clinic where, under direct clinical faculty supervision, they participate in the provision of optometric services to clinic patients. In addition to primary care, they are exposed to the provision of contact lens, ocular health and optical services.
Prereq: Successful completion of Year Two

OPTOM 349 F 3C 0.5
Public Health Optometry
Introduction to the foundation and basic sciences of public health
with an emphasis on the epidemiology of vision problems.

OPTOM 350 W 4C 0.5
Practice Management and Jurisprudence
Practice management. Financial management. Interprofessional relations. Office design. Optometric assistants. Professional associations. Legal aspects of practising optometry in Canada.

OPTOM 352 F 3C,3L 0.5
Clinical Techniques 3: Strabismus and Aniseikonia
Detection and evaluation of sensory and motor characteristics of vision in aniseikonic, strabismic and non-strabismic patients. Classifications, diagnoses, prognoses, and modes of therapy for aniseikonic, non-strabismic, and strabismic patients.
Prereq: OPTOM 242, 251, 252

OPTOM 353 F 2C 0.5
Professional Ethics and Optometric Communication
A survey of alternative philosophical perspectives involved in resolution of sample ethical and moral issues confronting optometrists. Awareness of the explicit and implicit contents of written and vocal communications. An exploration of optometric communication issues related to letter and report writing, patient counselling, patient referral, fee presentation, and complaint management.

OPTOM 364 W 3C 0.5
Pharmacology 2: Ocular Diagnostics and Therapy
Principles of ophthalmic pharmaceutical preparation and pharmacokinetics. Selection and use of all ophthalmic diagnostic pharmaceutical agents (DPA's), including dyes, stains, topical ocular anesthetics, mydriatics, cycloplegics, miotics; palliative therapeutic agents (artificial tears, etc.) and ophthalmic therapeutic pharmaceutical agents (TPA's). Coverage will include product details and recommended guidelines for their use and follow-up procedures.
Prereq: OPTOM 245, 255, 264

OPTOM 367 W 3C 0.5
Contact Lenses 2
Detection and management of chronic and acute complications induced by contact lenses. Contact lens management options for special conditions such as dry eye, aphakia and keratoconus (and other corneal irregularities). Disposable lenses and replacement regimens. Extended wear options. Alternative management of refractive errors such as orthokeratology and refractive surgery. Contact lenses and presbyopia.
Prereq: OPTOM 245, 347

OPTOM 368 W 3C,3L 0.5
Gerontology and Low Vision
An introduction to the epidemiology of ageing and the clinical effects of ageing on the visual system. The optometric assessment and management of the ageing patient. An introduction to low vision care with emphasis on assessment and management of visual impairment and disability, including optical and non-optical therapies. The epidemiology of vision impairment, multidisciplinary management, and associated rehabilitative services will be discussed.
Prereq: OPTOM 242, 252, 346

OPTOM 372 F 3C 0.5
Pediatric Optometry and Learning Disabilities
Consideration of the development of the optical and sensory-motor functions of the visual system provides the basis upon which this course examines the clinical testing and treatment procedures for infants and young children. Aspects of vision problems related to children with learning difficulty and special needs, including tests and measurements taken by optometrists, are covered. The role of the optometrist in conjunction with the parents, teachers, and psychologists is discussed.
Prereq: OPTOM 242, 252

OPTOM 374 W 2C 0.5
Ocular Pathology 3
Advanced considerations of the etiology, signs, symptoms, diagnosis, and treatment and management of ocular disease. Emphasis will be placed on the clinical case management with therapeutic pharmaceutical agents.
Prereq: OPTOM 245, 255

YEAR FOUR

OPTOM 412 S,F,W 0.75
Case Analysis 2
Building on analytical principles developed in OPTOM 342, this course involves student, case-based presentations in a grand rounds format. Each student chooses one, different, interesting case from his/her previous clinical experience. The student presents the case and answers questions related to the case and the patient's condition(s). Faculty discussants will direct the students in assessing the basic and clinical science features of the cases. Patient cases may be chosen from any aspect of optometric practice.
Prereq: All third-year Optometry courses

OPTOM 441 S,F,W 3L 0.5
Optometry Research Proposal
An independent paper in the form of literature review on the student's area of interest, experimental design proposition, and preliminary data. Before registering in the course the student and the designated supervisor must submit to the co-ordinator a research proposal for the student's research area. The format of the paper is to be determined with the supervisor and may be in chapters, in journal style, or in an oral presentation, during the registered term, at seminar sessions

OPTOM 448A/B/C S,F,W 36 Clinic 3.0 each
Optometry Clinics
Optometry students learn all aspects of clinical practice by providing direct patient care under faculty supervision and instruction. Areas of clinical activity include oculo-visual assessment, the diagnosis and management of ocular disease, contact lens care, diagnosis and treatment of oculomotor-sensory disorders, low vision rehabilitation, and ophthalmic dispensing. In addition to the main university clinic, student will gain experience in a variety of settings, including hospitals, community health clinics, specialty care clinics, nursing homes, schools, private practices, and institutions for people with special needs. Each student will complete a one term externship in ocular therapeutics and disease management and a primary care rotation in private practice. Students will be required to show successful performance in each of the components of clinical training to which they are assigned. Evaluation may involve oral examination, assessment of performance with patients, record review, and/or demonstration of techniques.
Prereq: All third year Optometry courses

OPTOM 451 S,F,W 3L 0.5
Optometry Research Project
An independent research project on an approved topic, supervised by a faculty member. This is the completion of the research proposal in OPTOM 441 and it is recommended that the format of the report, to be determined with the supervisor, follow the format selected for OPTOM 441.*Prereq: OPTOM 441 (77% minimum mark)*

OPTOM 461A-Z S,F,W 3L 0.5
Advanced Study Topics
Intensive study of a specialty optometric topic of mutual interest to a professor and a small group of students. Consult course co-ordinator each term for list of offerings.

OPTOM 471 S,F,W 3L 0.75
Clinical Techniques 4
This course will provide an opportunity for optometry students to discuss and evaluate clinical techniques, instrumentation, and ideologies not covered in the current curriculum. Students will be encouraged to use their basic knowledge of the vision sciences to provide a perceptive critique of the clinical subjects addressed.
Prereq: All third year optometry courses

(OPTOM 609/OPTOM 629)
An elective (approved by the undergraduate officer) may be chosen as an alternative to OPTOM 441.

Appendix C: Calculation of UW Optometry Performance

Measurement	Formula
Yearly Mean	$\sum \frac{cy}{ny}$
Median Score; N=odd	$YR\frac{(N+1)}{2}$
Median Score; N=even	$\left[YR\frac{N}{2}+\left(YR\frac{N}{2}+1\right)\right]0.5$
Overall Mean	$\sum \frac{YR}{N}$
Prerequisite Mean	$\sum \frac{cp}{np}$

Note:
The formulas employed by the UW School of Optometry to calculate the university median score (MS), overall mean (OM), prerequisite mean (PM) and yearly mean (YM) are shown.
C_y = courses taken in a science year; n_y = number of courses taken that year; N = number of science years; C_p = prerequisite courses; n_p = number of prerequisite courses. N.B. For calculation of MS, YMs must be arranged in order of value not in chronological occurrence.

Appendix D: Numbers of Offers, Refusals, & Declines

Table D.1: Number of Offers, Refusals, Accepts, and Declines

	1992	1993	1994	1995	1996
Initial Offers	61	60	60	60	60
Contingency List	13	11	11	10	10
Refusals	162	177	161	181	196
Accepts	60	60	60	60	60
Declines	14	8	5	2	3

Appendix E: Administrative Approval Letters

August 18, 1995

Jacob G. Sivak, PhD
Director, School of Optometry & Associate Dean, Faculty of Science
School of Optometry, University of Waterloo
Waterloo, Ontario N2L 3G1

Dear Dr. Sivak:

Re: Request for Administrative Consent for Study

Name of Researcher: Marlee M. Spafford, OD, MSc, FAAO
PhD Student
Ontario Institute for Studies in Education (OISE)
Higher Education Group

Title of Study: Examining the Relationships between the Subjective Dispositions and the Objective Consequences of an Optometry Program's Admission Interviewing Practices

This letter is a request for your permission to conduct the above named study at the University of Waterloo, School of Optometry. There are two parts to this study. One part involves statistical analyses of University of Waterloo School of Optometry admission and optometry grade data. I am requesting your permission to access these records for the purposes of this study. These records will remain in their usual location (i.e. the Admissions/Undergraduate Affairs Office). Data will be reported in aggregate form. Confidentiality will be maintained.

For your information, the other part of the study involves voluntary participation in a single research interview and/or a single research questionnaire. The research interview will last approximately 45 minutes. The research questionnaire will take approximately 20 to 30 minutes to complete.

The study forms the basis of my doctoral thesis at the Ontario Institute for Studies in Education. The aim of the study is to examine the relationships between the purposes and consequences of providing interviews as part of the admission process at the University of Waterloo (UW) Doctor of Optometry program. A questionnaire will be used to gather the opinions of UW optometry applicants, Canadian optometric association presidents as well as UW optometry Admission Committee members and UW optometry faculty members not sitting on the Admission Committee. The information collected in the research interview will be used in the development of the research questionnaire. The research interview will be conducted by me. I will ask participants about their opinions regarding the purposes and consequences of interviewing optometry applicants. The study will provide useful data on the impact of interviewing applicants for the UW Doctor of Optometry program.

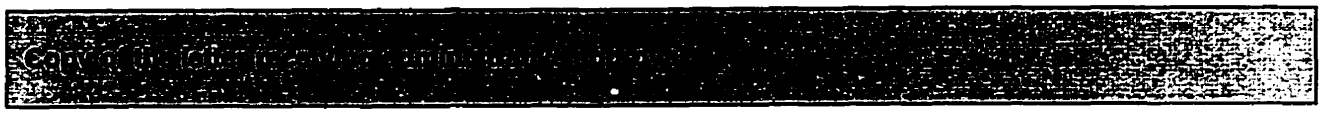
The data collected will be confidential and viewed by me, and possibly my thesis committee. Participants may decline answering any questions that they do not wish to answer. They can withdraw their consent to participate in the study at any time before, during and after the research interview without penalty. There is no remuneration for participating in the study.

This study has been submitted for ethical review to the Ethical Review Committee at OISE and the Office of Human Research and Animal Care at the University of Waterloo. Approval has been obtained from both committees.

Thank you for considering my request. I would appreciate a written response to my request for administrative approval of this study by August 25, 1995, if possible. If you have any questions about this study, please feel free to contact me at (519) 888-4567 ext. 6286.

Sincerely,

Marlee M. Spafford, OD, MSc, FAAO
OISE PhD Student
Higher Education Group



August 21, 1995

Dear Dr. Spafford

Re: Administrative Consent for PhD Thesis

You have my permission to access the pertinent admission and optometry records for the purposes of your doctoral thesis.

Good luck with your study.

Sincerely,

Jacob G. Sivak, PhD
Director, School of Optometry & Associate Dean, Faculty of Science

cc: Marie Amodeo
Admissions/Undergraduate Assistant

Appendix F: Research Interview Forms

August 21, 1995

Name of Researcher: Marlee M. Spafford, OD, MSc, FAAO
PhD Student
Ontario Institute for Studies in Education (OISE)
Higher Education Group

Title of Study: Examining the Relationships between the Subjective Dispositions and the Objective Consequences of an Optometry Programme's Admission Interviewing Practices

This letter is a request for your participation in the above named study. Participation in this study is voluntary and it involves attending one interview with me. The interview will last approximately 45 minutes.

The study forms the basis of my doctoral thesis at the Ontario Institute for Studies in Education. The aim of the study is to examine the relationships between the purposes and consequences of providing interviews as part of the admission process at the University of Waterloo (UW) Doctor of Optometry programme. I am particularly interested in what participants believe the UW optometry admission interview does accomplish and should accomplish. Five to ten potential interview participants have been randomly drawn from each of two groups: i) optometry students who received an UW optometry admission interview, and ii) optometry faculty who have interviewed optometry applicants in the past five years. The research interview will be used to assist me in the development of a research questionnaire which has a wider distribution as follows: i) every UW optometry applicant who was interviewed in 1995, ii) every Canadian optometric association president, iii) every member of the 1995 UW optometry Admission Committee. The research interview will be conducted by me. I will ask participants about their opinions regarding the purposes and consequences of interviewing optometry applicants. Attached you will find a list of questions that will provide the framework of the interview. The study will provide useful data on the impact of interviewing applicants for the UW Doctor of Optometry programme.

The information you provide is confidential. I, and possibly my thesis committee, will view the information collected from the interviews. Your identity will not be revealed to anyone, including the thesis committee. You may decline answering any questions that you do not wish to answer. You can withdraw your consent to participate in the study at any time before, during and after the research interview without penalty. Your participation or the lack thereof will in no way affect your academic or employment standing at the University of Waterloo. There is no remuneration for participation in the study.

This study has been approved by the Ethical Review Committee at OISE and the Office of Human Research and Animal Care at the University of Waterloo. Questions regarding the study can be directed to the managers at OISE (416: 923-6641 x2203) or at UW (519: 885-1211 x6005). Copies of the thesis will be kept in the Jackson Library at OISE and the Optometry Reading Room at the UW School of Optometry.

Thank you for your assistance with this study. If you are willing to participate in this study, please sign the attached letter of consent and return it to my mailbox by September 11, 1995. If you have any questions about this study, please feel free to contact me at my UW business number (519) 885-1211 x6286.

Sincerely,

Marlee M. Spafford, OD, MSc, FAAO
OISE PhD Student
Higher Education Group

Name of Researcher:	Marlee M. Spafford, OD, MSc, FAAO PhD Student Ontario Institute for Studies in Education (OISE) Higher Education Group
Title of Study:	Examining the Relationships between the Subjective Dispositions and the Objective Consequences of an Optometry Programme's Admission Interviewing Practices

I _____ (please print your name) have read the attached letter of information and I am willing to participate in the research interview conducted by the researcher, Marlee M. Spafford, for the sole purposes of the above named study. I understand the following issues: I) I can withdraw my consent to participate at any time, before, during or after the research interview, ii) there is no remuneration for participating in this study, and iii) there is no penalty for withholding or withdrawing my consent at any time.

Participant Signature: Witness Signature:

_____ _____

Interview Questions for Optometry Students

1. What do you recall about your UW optometry admission interview (e.g. topics discussed, comments made)?
2. Why did you think you were granted an interview?
3. What do you think the purpose of the interview was?
4. What do you think the interviewers were looking for in the interview?
5. How do you think the Admission Committee uses the interview in its decisions?
6. Do you think you interview helped or hurt your application? Why?
7. How did you feel about your interview (e.g. happy, satisfied, disappointed, angry)? Explain.
8. How comfortable were you with the interviewers' behavior and attire? Explain.
9. How did the interview compare with your expectations of it?
10. What did you like best and what did you like least about the interview?
11. Would you like to see the interview maintained, revised or eliminated? Explain.

Interview Questions for Optometry Interviewers

1. Why do you think the UW School of Optometry interviews applicants (i.e. what is the purpose of the interview and the criteria for interviewing)?
2. Why do you participate in the interviews?
3. What do you think the interview score should versus does reflect?
4. What would an applicant do in an interview that would impress you?
5. What would an applicant do in an interview that would disturb you?
6. What do you look for in an applicant (i.e. in terms of skills or attributes)?
7. What are the most positive aspects of the interview and what are the most negative aspects of the interview?
8. In your opinion, which selection criteria should have the most weight in UW optometry admission decisions?
9. If it was your decision to maintain, revise or eliminate the interview, what would you do? Explain.

Appendix G: Research Questionnaire

OPINIONS ABOUT OPTOMETRY ADMISSION INTERVIEWS

Section IA: Respondent Information For Applicants Only

1. Indicate whether you are female or male.

   A. Female.
   B. Male.

2. Indicate how many UW School of Optometry admission interviews you have attended.

   I've been interviewed _____ time(s).

3. Indicate which one of the following categories best describes you at the present (circle one response).

   A. Internal candidate (I am taking or have taken at least one UW course).
   B. External candidate (I am not taking and have never taken a UW course).

4. Indicate which of the following categories best describes you at the present (circle one response).

   A. Permanent resident of **Ontario.**
   B. Permanent resident of a **contract province.***
   C. Permanent resident of a **non-contract region.****
   D. **Student visa** (i.e. not a permanent resident of Canada).

   * **contract provinces** are: Alberta, British Columbia, Manitoba, New Brunswick, Prince Edward Island, and Saskatchewan.
   ** **non-contract regions** are Newfoundland, Nova Scotia, Quebec, Yukon Territory and the Northwest Territories.

Circle one letter from **'A to E'** that best reflects your level of agreement with each of the following statements about **why you believe you were granted a UW optometry interview.**

A. Strongly Agree	B. Agree	C. Neither Agree Nor Disagree	D. Disagree	E. Strongly Disagree

I believe I was granted a UW optometry admission interview because of my:

Agree → → → → → → Disagree

5.	**university/college grades.**	A	B	C	D	E
6.	**OAT score(s).**	A	B	C	D	E
7.	**autobiographic sketch, essay, & references.**	A	B	C	D	E
8.	**province/territory of residence.**	A	B	C	D	E
9.	**unique application (e.g. older applicant, past career).**	A	B	C	D	E

APPLICANTS PROCEED TO SECTION II (PAGE 4)

Section IB: Respondent Information <u>For Interviewers Only</u>

1. Indicate whether you are female or male.

   A. Female.
   B. Male.

2. Indicate which of the following categories best describes you at the present (circle one response).

   A. Faculty member: professorial rank
   B. Faculty member: lecturer rank

3. **Annually,** I interview about _____ optometry candidate(s).

4. Have you sat on the UW Optometry Admission Committee at any time from 1992?

   A. Yes
   B. No

To the right of each of the following statements, circle one letter from **'A to E'** that best reflects your level of agreement with the statement about **what influences you to interview optometry candidates.**

A. **Strongly Agree**	**B.** **Agree**	**C.** **Neither Agree Nor Disagree**	**D.** **Disagree**	**E.** **Strongly Disagree**

I interview optometry candidates because:

Agree ➞ ➞ ➞ ➞ ➞ ➞ Disagree

5.	**the Administration asks me to help interview.**	A	B	C	D	E
6.	**I like to pull my weight administratively.**	A	B	C	D	E
7.	**I consider it my duty to the profession and public.**	A	B	C	D	E
8.	**interviews are an important part of admissions.**	A	B	C	D	E
9.	**helping out entitles me to a voice about admissions.**	A	B	C	D	E
10.	**I consider myself to be a good interviewer.**	A	B	C	D	E

FACULTY PROCEED TO SECTION II (PAGE 4)

Section II: The Purpose(s) Of An Ideal Optometry Admission Committee

In this section, a number of possible functions that an optometry admission committee might try to serve are listed. You are asked to indicate your level of agreement with each of these functions as they pertain to what you would like an **ideal optometry admission committee** to do. In this section, you are not to consider whether the UW optometry Admission Committee actually does carry out these functions.

To the right of each function, circle one letter from **'A to E'** that best reflects your level of agreement with the statement about an **ideal optometry admission committee**.

A. Strongly Agree	B. Agree	C. Neither Agree Nor Disagree	D. Disagree	E. Strongly Disagree

An ideal optometry admission committee should:

Agree ➡ ➡ ➡ ➡ ➡ ➡ Disagree

1.	**gather information from candidates.**	A	B	C	D	E
2.	**gather unique data with each tool (OAT, essay, etc.).**	A	B	C	D	E
3.	**provide information to candidates.**	A	B	C	D	E
4.	**select candidates for the optometry programme.**	A	B	C	D	E
5.	**clarify information submitted in the application.**	A	B	C	D	E
6.	**predict who will succeed as optometrists.**	A	B	C	D	E
7.	**predict who will succeed as optometry students.**	A	B	C	D	E
8.	**provide a chance for candidates to meet faculty.**	A	B	C	D	E
9.	**reduce candidates' concerns about admissions.**	A	B	C	D	E
10.	**promote the optometry programme.**	A	B	C	D	E
11.	**recruit potential candidates.**	A	B	C	D	E

Note:

In this and other sections, you may wish to make additional comments. Space to do so is provided in Section X at the end of the questionnaire. Please place any comments in that space and indicate to what Section your comment(s) refer.

Section III: The Purpose(s) Of An Ideal Optometry Admission Interview

In this section, your responses should reflect how you would like an **ideal optometry admission interview** to be. You are not to consider whether the UW optometry interview is successful.

To the right of each function, circle one letter from **'A to E'** that best reflects your level of agreement with the statement about an **ideal optometry admission interview**.

A. Strongly Agree	B. Agree	C. Neither Agree Nor Disagree	D. Disagree	E. Strongly Disagree

An ideal optometry admission interview should help:

Agree ➞ ➞ ➞ ➞ ➞ ➞ Disagree

1.	**gather information from candidates.**	A	B	C	D	E
2.	**gather different data than with other tools (e.g. OAT).**	A	B	C	D	E
3.	**provide information to candidates.**	A	B	C	D	E
4.	**select candidates for the optometry programme.**	A	B	C	D	E
5.	**clarify information submitted in the application.**	A	B	C	D	E
6.	**predict who will succeed as optometrists.**	A	B	C	D	E
7.	**predict who will succeed as optometry students.**	A	B	C	D	E
8.	**provide a chance for candidates to meet faculty.**	A	B	C	D	E
9.	**reduce candidates' concerns about admissions.**	A	B	C	D	E
10.	**promote the optometry programme.**	A	B	C	D	E
11.	**recruit potential candidates.**	A	B	C	D	E

Section IV: The Actual Purpose(s) Of The UW Optometry Interview

In this section, you are asked to consider your experience with the UW optometry admission interview and indicate your level of agreement with each of these functions as they pertain to it.

To the right of each function, circle one letter from **'A to E'** that best reflects your level of agreement with the statement about the **UW optometry admission interview**.

A. Strongly Agree	B. Agree	C. Neither Agree Nor Disagree	D. Disagree	E. Strongly Disagree

The UW optometry admission interview helps:

Agree ➞ ➞ ➞ ➞ ➞ ➞ Disagree

1.	**gather information from candidates.**	A	B	C	D	E
2.	**gather different data than with other tools (e.g. OAT).**	A	B	C	D	E
3.	**provide information to candidates.**	A	B	C	D	E
4.	**select candidates for the optometry programme.**	A	B	C	D	E
5.	**clarify information submitted in the application.**	A	B	C	D	E
6.	**predict who will succeed as optometrists.**	A	B	C	D	E
7.	**predict who will succeed as optometry students.**	A	B	C	D	E
8.	**provide a chance for candidates to meet faculty.**	A	B	C	D	E
9.	**reduce candidates' concerns about admissions.**	A	B	C	D	E
10.	**promote the optometry programme.**	A	B	C	D	E
11.	**recruit potential candidates.**	A	B	C	D	E

Section V: Possible Traits Evaluated By An Ideal Admission Committee

In this section, a variety of candidate traits is listed. **You are asked to indicate your level of agreement with an optometry admission committee trying to evaluate each trait.** If you are unsure what is meant by a particular trait, you can refer to the glossary of terms on the next page. The glossary provides you with examples of each trait to help you define the terms.

To the right of each candidate trait, circle one letter from **'A to E'** that best reflects your level of agreement with the statement about an **ideal optometry admission committee**.

A. Strongly Agree	B. Agree	C. Neither Agree Nor Disagree	D. Disagree	E. Strongly Disagree

An ideal optometry admission committee should try to evaluate the candidate's:

Agree ➞ ➞ ➞ ➞ ➞ ➞ Disagree

1.	**adaptability**	A	B	C	D	E
2.	**aggressiveness**	A	B	C	D	E
3.	**perseverance**	A	B	C	D	E
4.	**work ethic**	A	B	C	D	E
5.	**communication skills**	A	B	C	D	E
6.	**energy level**	A	B	C	D	E
7.	**perceptiveness**	A	B	C	D	E
8.	**presence**	A	B	C	D	E
9.	**creativity**	A	B	C	D	E
10.	**ability to delegate**	A	B	C	D	E
11.	**independent judgment**	A	B	C	D	E
12.	**planning skills**	A	B	C	D	E
13.	**cooperation**	A	B	C	D	E
14.	**coworker relations**	A	B	C	D	E
15.	**loyalty**	A	B	C	D	E
16.	**interpersonal skills**	A	B	C	D	E
17.	**body language**	A	B	C	D	E
18.	**motivation for pursuing optometry**	A	B	C	D	E
19.	**problem solving skills**	A	B	C	D	E
20.	**knowledge re: optometrist's scope of practice**	A	B	C	D	E
21.	**knowledge re: optometrist's duties**	A	B	C	D	E
22.	**knowledge re: optometrist's level of accountability**	A	B	C	D	E
23.	**knowledge re: optometrist's demands of the 'job'**	A	B	C	D	E
24.	**knowledge re: ethical principles**	A	B	C	D	E
25.	**moral (ethical) decision-making**	A	B	C	D	E
26.	**manual dexterity**	A	B	C	D	E
27.	**fashion**	A	B	C	D	E
28.	**beauty**	A	B	C	D	E
29.	**religious affiliation**	A	B	C	D	E
30.	**racial identification**	A	B	C	D	E
31.	**visible disability**	A	B	C	D	E

Glossary Of Candidate Traits
(Sections V, VI, & VII)

- ♣ Element of attitude orientation.
- ♦ Element of people skills.
- ♥ Element of managerial aptitude.
- ♠ Element of team orientation.

	Trait	Definitions OR Continuum of Examples
1.	**adaptability ♣**	inflexible; adapts; changes with any fluctuation in plan
2.	**aggressiveness ♣**	passive; assertive; obnoxious & offensive
3.	**perseverance ●**	quits easily; reasonable perseverance; bull-headed
4.	**work ethic ♣**	indifferent; dedicated; workaholic
5.	**communication skills ♦**	obstructive; communicates clearly; accents style over content
6.	**energy level ♦**	lackadaisical; energetic & enthusiastic; hyperactive
7.	**perceptiveness ♦**	insensitive; observant; dwells too much on people aspects
8.	**presence ♦**	forgettable (makes no impact); solid presence; phony
9.	**creativity ♥**	devoid of new ideas; innovative; reinvents the wheel
10.	**ability to delegate ♥**	never delegates; designates efficiently; gives out all work
11.	**independent judgment ♥**	resists decisions; competent decision maker; rushes decisions
12.	**planning skills ♥**	limited direction; functional planner; totally reactive
13.	**cooperation ♠**	totally self-motivated; cooperative; solely dependent on group
14.	**coworker relations ♠**	unable to motivate others; leader; "company social worker"
15.	**loyalty ♠**	subversive; dependable; devotion hinders objectivity
16.	**interpersonal skills**	uncaring and distant; makes others feel valued and included
17.	**body language**	body tremors; timid posture; assertive posture
18.	**motivation**	financially-oriented motives; service-oriented motives
19.	**problem solving skills**	unable to identify a problem; able to identify & solve problems
20.	**scope of practice**	knowledge of limits of optometric practice
21.	**optometrist's duties**	knowledge of what an optometrist does
22.	**level of accountability**	knowledge of regulatory bodies & responsibilities
23.	**demands of the 'job'**	knowledge of physical, emotional & intellectual demands
24.	**ethical principles**	autonomy; beneficence; nonmaleficence; justice
25.	**moral decision-making**	applies principles & theory to analyze & resolve dilemmas
26.	**manual dexterity**	ability to perform fine motor tasks
27.	**fashion**	hair length; attire; cleanliness
28.	**beauty**	attractiveness
29.	**religious affiliation**	Agnostic; Buddhist; Christian; Hindu; Islamic; Jewish; etc.
30.	**racial identification**	Aboriginal; African; Asian; Caucasian; Hispanic; Indian; etc.
31.	**visible disability**	limb amputation; facial scarring; wheelchair bound

Section VI: Possible Traits Evaluated In An Ideal Admission Interview

In this section, the same variety of candidate traits as appeared in the previous section is listed. This time **you are asked to indicate your level of agreement with an ideal optometry admission interview trying to evaluate each particular trait.** You are not indicating whether you believe the UW optometry admission interview actually evaluates these traits.

To the right of each candidate trait, circle one letter from **'A to E'** that best reflects your level of agreement with the statement about the **optometry admission interview**.

A. Strongly Agree	B. Agree	C. Neither Agree Nor Disagree	D. Disagree	E. Strongly Disagree

An ideal optometry admission interview should try to evaluate the candidate's:

Agree ➡ ➡ ➡ ➡ ➡ ➡ Disagree

1.	**adaptability**	A	B	C	D	E
2.	**aggressiveness**	A	B	C	D	E
3.	**perseverance**	A	B	C	D	E
4.	**work ethic**	A	B	C	D	E
5.	**communication skills**	A	B	C	D	E
6.	**energy level**	A	B	C	D	E
7.	**perceptiveness**	A	B	C	D	E
8.	**presence**	A	B	C	D	E
9.	**creativity**	A	B	C	D	E
10.	**ability to delegate**	A	B	C	D	E
11.	**independent judgment**	A	B	C	D	E
12.	**planning skills**	A	B	C	D	E
13.	**cooperation**	A	B	C	D	E
14.	**coworker relations**	A	B	C	D	E
15.	**loyalty**	A	B	C	D	E
16.	**interpersonal skills**	A	B	C	D	E
17.	**body language**	A	B	C	D	E
18.	**motivation for pursuing optometry**	A	B	C	D	E
19.	**problem solving skills**	A	B	C	D	E
20.	**knowledge re: optometrist's scope of practice**	A	B	C	D	E
21.	**knowledge re: optometrist's duties**	A	B	C	D	E
22.	**knowledge re: optometrist's level of accountability**	A	B	C	D	E
23.	**knowledge re: optometrist's demands of the 'job'**	A	B	C	D	E
24.	**knowledge re: ethical principles**	A	B	C	D	E
25.	**moral (ethical) decision making**	A	B	C	D	E
26.	**manual dexterity**	A	B	C	D	E
27.	**fashion**	A	B	C	D	E
28.	**beauty**	A	B	C	D	E
29.	**religious affiliation**	A	B	C	D	E
30.	**racial identification**	A	B	C	D	E
31.	**visible disability**	A	B	C	D	E

Section VII: Traits Evaluated in The Actual UW Optometry Interview

In this section, the same variety of candidate traits as appeared in the previous two sections is listed one final time. Now you are asked not for your opinions regarding what an ideal optometry admission process or interview should evaluate but rather **you are asked to indicate your level of agreement with whether the UW optometry admission interview actually does evaluate these traits.**

To the right of each candidate trait, circle one letter from **'A to E'** that best reflects your level of agreement with the statement about the **UW optometry admission interview**.

A. Strongly Agree	B. Agree	C. Neither Agree Nor Disagree	D. Disagree	E. Strongly Disagree

The UW optometry admission interview evaluates the candidate's:

Agree ➡ ➡ ➡ ➡ ➡ ➡ Disagree

1.	**adaptability**	A	B	C	D	E
2.	**aggressiveness**	A	B	C	D	E
3.	**perseverance**	A	B	C	D	E
4.	**work ethic**	A	B	C	D	E
5.	**communication skills**	A	B	C	D	E
6.	**energy level**	A	B	C	D	E
7.	**perceptiveness**	A	B	C	D	E
8.	**presence**	A	B	C	D	E
9.	**creativity**	A	B	C	D	E
10.	**ability to delegate**	A	B	C	D	E
11.	**independent judgment**	A	B	C	D	E
12.	**planning skills**	A	B	C	D	E
13.	**cooperation**	A	B	C	D	E
14.	**coworker relations**	A	B	C	D	E
15.	**loyalty**	A	B	C	D	E
16.	**interpersonal skills**	A	B	C	D	E
17.	**body language**	A	B	C	D	E
18.	**motivation for pursuing optometry**	A	B	C	D	E
19.	**problem solving skills**	A	B	C	D	E
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22.	**knowledge re: optometrist's level of accountability**	A	B	C	D	E
23.	**knowledge re: optometrist's demands of the 'job'**	A	B	C	D	E
24.	**knowledge re: ethical principles**	A	B	C	D	E
25.	**moral (ethical) decision-making**	A	B	C	D	E
26.	**manual dexterity**	A	B	C	D	E
27.	**fashion**	A	B	C	D	E
28.	**beauty**	A	B	C	D	E
29.	**religious affiliation**	A	B	C	D	E
30.	**racial identification**	A	B	C	D	E
31.	**visible disability**	A	B	C	D	E

Section VIII: Possible Changes To The UW Optometry Interview

In this section, **you are asked for your opinion about what if anything should be changed about the UW optometry admission interview.**

1. The **UW Optometry Admission Committee** should consider (circle one response):

A.	leaving the interview unchanged.	***(Proceed to Section IX)***
B.	subtly revising the interview.	***(Continue with this Section)***
C.	significantly revising the interview.	***(Continue with this Section)***
D.	eliminating the interview.	***(Proceed to Section IX)***

To the right of each of the following types of changes that could be made to the **UW optometry interview**, circle one letter from **'A to E'** that best reflects your level of agreement.

A. Strongly Agree	B. Agree	C. Neither Agree Nor Disagree	D. Disagree	E. Strongly Disagree

The UW Optometry Admission Committee should consider changing:

Agree ➡ ➡ ➡ ➡ ➡ ➡ Disagree

2.	**the interview length (currently 30 minutes).**	A	B	C	D	E
3.	**the number of interviewers (currently 2/interview).**	A	B	C	D	E
4.	**who interviews (currently faculty).**	A	B	C	D	E
5.	**the training requirements for interviewers.**	A	B	C	D	E
6.	**the interview's content (i.e. the topics covered).**	A	B	C	D	E
7.	**the style of questions (closed versus open-ended).**	A	B	C	D	E
8.	**the interview's importance in admission decisions.**	A	B	C	D	E
9.	**the time allowed for candidate questions.**	A	B	C	D	E
10.	**the amount candidates know about interviews.**	A	B	C	D	E
11.	**the interview stress level for candidates.**	A	B	C	D	E

Section IX: Possible UW Optometry Interview Biases

In this section, **consider both your experience(s) and what you may have heard others say about their experiences with the UW optometry admission interview**. To the right of each item, circle one letter from **'A to E'** that best reflects your level of agreement with the statement about the **UW optometry admission interview**.

A. Strongly Agree	B. Agree	C. Neither Agree Nor Disagree	D. Disagree	E. Strongly Disagree

In the UW optometry admission interview, some candidates are exposed to incidents of:

Agree ➡ ➡ ➡ ➡ ➡ ➡ Disagree

1.	**sexism**	A	B	C	D	E
2.	**racism**	A	B	C	D	E
3.	**homophobia**	A	B	C	D	E
4.	**ageism**	A	B	C	D	E
5.	**beautyism**	A	B	C	D	E

Section X: Respondent Comments

In the space below, your comments are welcome about the length of time it took to complete this questionnaire, the wording of the questions and the appropriateness of the questions. Please indicate relevant questions or issues you believe were omitted.

Thank you for taking the time to complete this questionnaire.

Appendix H: Research Questionnaire Letter of Information

May 1, 1996

Name of Researcher: **Marlee M. Spafford, OD, MSc, FAAO**
PhD Student
Ontario Institute for Studies in Education (OISE)
Higher Education Group

Title of Study: **Manifest and Latent Functions of an Optometry Programme's Admission Interview**

This letter is a request for your participation in the above named study. Participation in this study is voluntary and it involves completing the attached questionnaire which will take approximately 20 minutes to complete. Providing your opinions about the University of Waterloo (UW) School of Optometry admission interview will greatly contribute to the accuracy of the study's findings as well as provide an opportunity for the UW School of Optometry to review its interviewing process.

The study has received the support of the UW School of Optometry and it forms the basis of my doctoral thesis at the Ontario Institute for Studies in Education. The aim of the study is to examine the purposes and consequences of interviewing applicants as part of the admission process at the UW Doctor of Optometry programme. In certain sections of this questionnaire, your opinions will be asked in terms of three different contexts:

i) what an **ideal optometry admission committee** should try to accomplish,
ii) what an **ideal optometry interview** should try to accomplish,
iii) what the **UW optometry interview** actually does accomplish.

This questionnaire is being given to every UW optometry faculty member and every UW optometry applicant interviewed in 1996. Do not indicate your name on the questionnaire because it is to be completed anonymously. The information you provide is confidential and will be viewed by me and, possibly, by my thesis committee. Your participation, or lack thereof, will in no way affect your application status or employment status. You may decline answering any questions that you do not wish to answer. Faculty members should complete all sections except Section IA. Applicants should complete all sections except Section IB. **Please use the enclosed, stamped, self-addressed envelope to return your completed questionnaire by June 30, 1996.** If you choose not to participate in the study, please still return the questionnaire. The number on the lower left corner of the return envelope is for administrative purposes only. Tracking numbered returned envelopes avoids recipients of the questionnaire being disturbed by a reminder letter and reduces mailing costs. I will not have access to the list matching numbers and names, therefore your identity will be protected.

This study has been approved by the Ethical Review Committee at OISE and the Office of Human Research and Animal Care at the University of Waterloo. Questions regarding the study can be directed to Ms. Janice Verner at OISE (416: 923-6641, x2203) or Dr. Susan Sykes at UW (519: 885-1211, x6005). Once completed, copies of the thesis will be kept in the Jackson Library at OISE and the Optometry Learning Resource Centre at the UW School of Optometry.

Thank you for your assistance with this study. If you have any questions about this study that you wish to direct to me, please use my UW business phone number (519: 885-1211, x6286).

Sincerely,

Marlee M. Spafford, OD, MSc, FAAO
OISE PhD Student
Higher Education Group

Encl.

Appendix I: Questionnaire Reminder Letters

June 30, 1996

Name of Researcher:	Marlee M. Spafford, OD, MSc, FAAO PhD Student Ontario Institute for Studies in Education (OISE) Higher Education Group
Title of Study:	Manifest and Latent Functions of an Optometry Programme's Admission Interview

This letter serves as a reminder of the above named study. In early June, you should have received a questionnaire and accompanying letter requesting your participation in this study of the admission interviewing process at the University of Waterloo (UW) School of Optometry. It takes approximately 20 minutes to complete the questionnaire. Providing your opinions about the UW School of Optometry admission interview will greatly contribute to the accuracy of the study's findings as well as provide an opportunity for the UW School of Optometry to review its interviewing process.

If you have already returned your questionnaire, then thank you for doing so. You can disregard this reminder.

If you have not had an opportunity to complete the questionnaire, you may still participate by returning it by August 3, 1996. Please use the stamped, self-addressed envelope that accompanied the questionnaire. If you choose not to participate in the study, please still return the questionnaire so that you are not troubled by further reminders.

If you have misplaced your questionnaire or you never received your questionnaire, you can contact Marion Brown at the UW School of Optometry (Phone: 519: 885-1211, x3178; Fax: 519: 725-0784; E-mail: ma4brown@sciborg.uwaterloo.ca). Marion will send you the questionnaire, explanatory letter and self-addressed, stamped envelope.

I have no access to the identities of those who do or do not return their questionnaires.

Thank you for your assistance in this study. If you have any questions about this study that you wish to direct to me, please use my UW business phone number (519: 885-1211, x6286).

Sincerely,

Marlee M. Spafford, OD, MSc, FAAO
OISE PhD Student
Higher Education Group

August 1, 1996

Name of Researcher:	Marlee M. Spafford, OD, MSc, FAAO PhD Student Ontario Institute for Studies in Education (OISE) Higher Education Group
Title of Study:	Manifest and Latent Functions of an Optometry Programme's Admission Interview

This letter serves as the final reminder of the above named study. In early June, you should have received a questionnaire and accompanying letter requesting your participation in this study of the admission interviewing process at the University of Waterloo (UW) School of Optometry. It takes approximately 20 minutes to complete the questionnaire. Providing your opinions about the UW School of Optometry admission interview will greatly contribute to the accuracy of the study's findings as well as provide an opportunity for the UW School of Optometry to review its interviewing process.

If you have already returned your questionnaire, then thank you for doing so. You can disregard this reminder.

If you have not had an opportunity to complete the questionnaire, you may still participate by returning it by September 16, 1996. Please use the stamped, self-addressed envelope that accompanied the questionnaire.

If you have misplaced your questionnaire or you never received your questionnaire, you can contact Marion Brown at the UW School of Optometry (Phone: 519: 885-1211, x3178; Fax: 519: 725-0784; E-mail: ma4brown@sciborg.uwaterloo.ca). Marion will send you the questionnaire, explanatory letter and self-addressed, stamped envelope.

I have no access to the identities of those who do or do not return their questionnaires.

Thank you for your assistance in this study. If you have any questions about this study that you wish to direct to me, please use my UW business phone number (519: 885-1211, x6286).

Sincerely,

Marlee M. Spafford, OD, MSc, FAAO
OISE PhD Student
Higher Education Group

Appendix J: Frequencies of Questionnaire Responses

Descriptive statistics and frequency distributions of survey responses

Section IA: Respondent Information for Applicants Only

IA:1: Applicant Sex Break-down

No. of Female:	62
No. of Male:	47

IA:2: Number of UW Interviews Attended

Mean:	1.3
Median:	1.0
Standard Deviation:	0.5
Minimum:	1.0
Maximum:	3.0

IA:3: Applicant Internal/External Break-down

No. of Internal:	38
No. of External:	71

IA:4: Applicant Residence Break-down

No. of Ontario:	59
No. of Contract:	48
No. of Non-Contract:	01
No. of Student Visa:	01

IA:5-9: I believe I was granted a UW optometry admission interview because of my:

Item #	Item Topic	Applicants					
		A^+	A	N	D	D^+	n
IA:5	gather information from candidates	51	42	8	6	2	109
IA:6	gather unique data with each tool	39	45	15	9	1	109
IA:7	provide information to candidates	44	46	13	3	3	109
IA:8	select candidates for the optometry program	7	19	34	25	24	109
IA:9	clarify information submitted in the application	3	7	24	30	44	108

N.B.: A^+ = strongly agree; A = agree; N = neither agree nor disagree; D = disagree; D^+ = strongly disagree

Section IB: Respondent Information for Interviewers Only

IB:1: Interviewer Sex Break-down

No. of Female: 06
No. of Male: 14

IB:2: Interviewer Rank Break-down

No. of Professors: 13
No. of Lecturers 07

IB:3: Number of Candidates Interviewed Annually

Mean: 8.6
Median: 8.0
Standard Deviation: 4.4
Minimum: 001
Maximum: 016

IB:4: Admission Committee Membership Since 1992

Yes : 10
No: 10

IB:5-10: I interview optometry candidates because:

Item #	Item Topic	Interviewers					
		A+	A	N	D	D+	n
IB:5	the Administration asks me to help interview	14	5	1	0	0	20
IB:6	I like to pull my weight administratively	11	7	1	0	1	20
IB:7	I consider it my duty to the profession and public	10	4	5	0	1	20
IB:8	interviews are an important part of admissions	8	8	1	0	3	20
IB:9	helping out entitles me to a voice	5	6	6	2	1	20
IB:10	I consider myself to be a good interviewer	5	7	7	1	0	20

Section II: The Purpose(s) of an Ideal Optometry Admission Committee

Item #	Item Topic	Applicants						Interviewers					
		A+	A	N	D	D+	n	A+	A	N	D	D+	n
II:1	gather information from candidates	78	29	1	0	0	108	16	4	0	0	0	20
II:2	gather unique data with each tool	56	39	10	2	1	108	11	5	1	0	2	19
II:3	provide information to candidates	58	32	10	6	2	108	7	7	3	3	0	20
II:4	select candidates for the optometry program	80	24	2	0	1	107	18	1	0	0	0	19
II:5	clarify information submitted in the application	46	43	12	6	1	108	9	7	2	2	0	20
II:6	predict who will succeed as optometrists	33	38	9	18	11	109	4	8	3	3	2	20
II:7	predict who will succeed as optometry students	23	48	12	17	8	108	4	9	3	3	1	20
II:8	provide a chance for candidates to meet faculty	27	32	29	17	3	108	2	4	8	5	1	20
II:9	reduce candidates' concerns about admissions	22	35	35	10	5	107	3	11	3	3	0	20
II:10	promote the optometry program	29	35	19	22	3	108	6	3	6	5	0	20
II:11	recruit potential candidates	23	31	21	22	12	109	6	2	6	4	2	20

Section III: The Purpose(s) of an Ideal Optometry Admission Interview

Item #	Item Topic	Applicants						Interviewers					
		A+	A	N	D	D+	n	A+	A	N	D	D+	n
III:1	gather information from candidates	69	33	4	3	0	109	10	8	1	0	0	19
III:2	gather unique data with each tool	62	28	13	4	2	109	10	8	1	0	1	20
III:3	provide information to candidates	40	49	12	4	3	108	3	10	3	4	0	20
III:4	select candidates for the optometry program	33	54	12	7	3	109	9	7	2	1	0	19
III:5	clarify information submitted in the application	39	44	15	8	3	109	6	7	3	3	0	19
III:6	predict who will succeed as optometrists	32	37	14	18	8	109	6	6	2	3	3	20
III:7	predict who will succeed as optometry students	24	32	23	22	7	108	3	9	5	1	2	20
III:8	provide a chance for candidates to meet faculty	22	37	25	21	4	109	3	5	5	6	1	20
III:9	reduce candidates' concerns about admissions	21	32	34	15	7	109	4	6	5	4	1	20
III:10	promote the optometry program	18	29	26	24	12	109	6	3	3	6	2	20
III:11	recruit potential candidates	20	19	29	23	17	108	5	1	3	6	5	20

Section IV: The Actual Purpose(s) of UW Optometry Interview

Item #	Item Topic	Applicants						Interviewers					
		A+	A	N	D	D+	n	A+	A	N	D	D+	n
IV:1	gather information from candidates	46	51	6	6	0	109	7	10	2	1	0	20
IV:2	gather unique data with each tool	50	28	12	11	8	109	7	11	0	1	1	20
IV:3	provide information to candidates	13	44	25	20	7	109	3	11	4	2	0	20
IV:4	select candidates for the optometry program	29	50	24	3	2	108	2	9	7	2	0	20
IV:5	clarify information submitted in the application	10	19	11	38	31	109	0	1	6	5	8	20
IV:6	predict who will succeed as optometrists	17	36	30	16	9	108	1	6	2	8	3	20
IV:7	predict who will succeed as optometry students	17	31	36	17	7	108	1	7	3	7	2	20
IV:8	provide a chance for candidates to meet faculty	18	47	21	16	7	109	3	8	5	2	2	20
IV:9	reduce candidates' concerns about admissions	1	10	39	40	19	109	2	6	6	3	3	20
IV:10	promote the optometry program	3	17	40	31	17	108	2	6	5	5	2	20
IV:11	recruit potential candidates	9	22	31	20	25	107	2	5	2	4	7	20

Section V: Possible Traits Evaluated by an Ideal Admission Committee

Item #	Item Topic	Applicants						Interviewers					
		A+	A	N	D	D+	n	A+	A	N	D	D+	n
V:1	adaptability	44	48	10	2	2	106	3	11	3	1	2	20
V:2	aggressiveness	14	54	24	11	3	106	5	10	3	0	2	20
V:3	perseverance	45	55	5	1	0	106	4	10	4	0	2	20
V:4	work ethic	75	27	3	2	0	107	6	10	1	0	3	20
V:5	communication skills	75	27	3	0	1	106	15	4	1	0	0	20
V:6	energy level	29	50	22	4	1	106	5	6	7	1	1	20
V:7	perceptiveness	34	54	12	6	0	106	6	9	3	0	2	20
V:8	presence	27	41	26	8	3	105	3	6	7	3	1	20
V:9	creativity	16	42	37	9	2	106	3	4	7	4	2	20
V:10	ability to delegate	10	47	37	9	1	104	0	2	9	7	2	20
V:11	independent judgment	51	43	10	3	0	107	6	10	3	0	1	20
V:12	planning skills	32	55	14	6	0	107	4	8	6	0	2	20
V:13	cooperation	41	50	12	4	0	107	6	8	5	0	1	20
V:14	coworker relations	37	55	11	2	2	107	7	6	5	1	1	20
V:15	loyalty	26	48	23	8	2	107	2	4	11	1	2	20
V:16	interpersonal skills	74	29	2	1	1	107	12	5	3	0	0	20
V:17	body language	14	41	26	18	7	106	2	5	6	5	2	20
V:18	motivation for pursuing optometry	76	26	4	2	0	108	8	9	2	1	0	20
V:19	problem solving skills	54	46	6	2	0	108	11	7	2	0	0	20
V:20	knowledge re: optometrist's scope of practice	35	59	10	4	0	108	6	7	4	2	1	20
V:21	knowledge re: optometrist's duties	43	54	9	2	0	108	6	8	5	0	1	20
V:22	knowledge re: optometrist's level of accountability	31	45	20	12	0	108	6	7	1	5	1	20
V:23	knowledge re: optometrist's demands of the 'job'	34	54	16	4	0	108	5	7	6	1	1	20
V:24	knowledge re: ethical principles	51	44	8	4	0	107	12	4	3	1	0	20
V:25	moral (ethical) decision-making	62	38	5	3	0	108	11	7	1	0	1	20
V:26	manual dexterity	4	29	42	28	5	108	5	6	3	3	3	20
V:27	fashion	2	16	18	33	39	108	0	2	5	6	7	20
V:28	beauty	0	2	6	39	61	108	0	0	2	5	13	20
V:29	religious affiliation	1	1	3	19	85	109	0	0	0	3	17	20
V:30	racial identification	0	2	4	17	86	109	0	0	0	2	18	20
V:31	visible disability	1	9	9	29	61	109	2	2	2	0	14	20

Section VI: Possible Traits Evaluated by an Ideal Admission Interview

Item #	Item Topic	Applicants						Interviewers					
		A+	A	N	D	D+	n	A+	A	N	D	D+	n
VI:1	adaptability	41	50	13	2	0	106	6	9	3	0	1	19
VI:2	aggressiveness	21	50	20	13	2	106	6	8	3	1	2	20
VI:3	perseverance	41	49	14	2	0	106	5	7	4	2	2	20
VI:4	work ethic	61	36	5	4	0	106	8	6	1	3	2	20
VI:5	communication skills	88	18	1	0	0	107	18	1	1	0	0	20
VI:6	energy level	39	45	15	6	1	106	3	9	4	2	2	20
VI:7	perceptiveness	43	52	10	2	0	107	7	8	3	0	2	20
VI:8	presence	39	38	20	9	1	107	5	7	6	1	1	20
VI:9	creativity	14	36	38	14	4	106	4	7	6	1	2	20
VI:10	ability to delegate	9	40	40	14	3	106	1	3	4	8	4	20
VI:11	independent judgment	55	40	10	2	0	107	5	11	2	1	1	20
VI:12	planning skills	28	52	21	4	1	106	4	7	6	1	2	20
VI:13	cooperation	36	53	13	4	1	107	7	6	5	0	1	19
VI:14	coworker relations	32	43	24	6	1	106	7	7	3	2	1	20
VI:15	loyalty	22	38	29	15	2	106	3	3	9	2	3	20
VI:16	interpersonal skills	79	23	3	2	0	107	14	4	2	0	0	20
VI:17	body language	25	52	18	5	5	105	3	9	3	3	2	20
VI:18	motivation for pursuing optometry	69	33	4	0	1	107	6	9	4	0	1	20
VI:19	problem solving skills	39	48	12	8	0	107	10	5	3	0	2	20
VI:20	knowledge re: optometrist's scope of practice	41	51	8	6	1	107	6	8	0	4	2	20
VI:21	knowledge re: optometrist's duties	42	50	9	5	1	107	6	8	1	3	2	20
VI:22	knowledge re: optometrist's level of accountability	32	41	26	8	0	107	6	7	1	4	1	19
VI:23	knowledge re: optometrist's demands of the 'job'	39	46	13	8	1	107	6	7	3	3	1	20
VI:24	knowledge re: ethical principles	46	45	11	5	0	107	9	8	1	1	1	20
VI:25	moral (ethical) decision-making	59	37	7	4	0	107	11	5	3	0	1	20
VI:26	manual dexterity	6	25	35	25	15	106	5	4	3	5	3	20
VI:27	fashion	3	22	15	21	46	107	0	4	3	6	7	20
VI:28	beauty	0	3	7	24	72	106	0	0	2	6	12	20
VI:29	religious affiliation	1	1	3	14	88	107	0	0	0	3	17	20
VI:30	racial identification	0	1	5	12	89	107	0	0	0	3	17	20
VI:31	visible disability	1	7	9	19	71	107	2	1	3	1	13	20

Section VII: Traits Evaluated in the Actual UW Optometry Interview

Item #	Item Topic	Applicants						Interviewers					
		A+	A	N	D	D+	n	A+	A	N	D	D+	n
VII:1	adaptability	18	40	26	16	5	105	1	5	7	3	4	20
VII:2	aggressiveness	13	37	24	25	5	104	1	9	6	2	2	20
VII:3	perseverance	16	37	27	21	4	105	0	5	8	4	3	20
VII:4	work ethic	24	35	24	18	4	105	1	7	4	6	2	20
VII:5	communication skills	69	32	2	0	3	106	6	12	1	0	1	20
VII:6	energy level	27	38	28	9	3	105	1	7	6	2	4	20
VII:7	perceptiveness	23	50	20	10	2	105	1	5	5	6	3	20
VII:8	presence	32	45	21	4	3	105	1	12	4	0	3	20
VII:9	creativity	11	13	32	38	11	105	0	3	8	5	4	20
VII:10	ability to delegate	6	16	33	38	12	105	0	0	5	8	7	20
VII:11	independent judgment	41	42	12	6	4	105	0	8	5	3	4	20
VII:12	planning skills	16	35	27	20	7	105	0	4	5	4	6	19
VII:13	cooperation	17	27	32	20	9	105	0	3	7	6	4	20
VII:14	coworker relations	17	26	26	25	11	105	0	4	6	6	4	20
VII:15	loyalty	10	25	31	27	12	105	0	3	4	7	6	20
VII:16	interpersonal skills	48	46	6	4	2	106	3	11	5	0	1	20
VII:17	body language	22	56	21	4	2	105	1	8	7	3	1	20
VII:18	motivation for pursuing optometry	69	31	5	1	0	106	2	16	1	0	1	20
VII:19	problem solving skills	32	43	12	12	7	106	1	7	6	2	4	20
VII:20	knowledge re: optometrist's scope of practice	66	32	6	2	0	106	7	11	2	0	0	20
VII:21	knowledge re: optometrist's duties	70	27	6	2	0	105	7	11	2	0	0	20
VII:22	knowledge re: optometrist's level of accountability	72	28	6	0	0	106	6	11	2	0	0	19
VII:23	knowledge re: optometrist's demands of the 'job'	65	30	9	2	0	106	6	11	3	0	0	20
VII:24	knowledge re: ethical principles	69	29	4	2	2	106	1	11	7	0	1	20
VII:25	moral (ethical) decision-making	63	28	6	5	3	105	1	8	8	1	2	20
VII:26	manual dexterity	5	9	12	40	39	105	0	0	4	5	11	20
VII:27	fashion	4	17	34	18	32	105	0	6	4	3	7	20
VII:28	beauty	1	8	30	21	45	105	0	4	4	2	10	20
VII:29	religious affiliation	1	1	14	21	68	105	0	0	1	3	16	20
VII:30	racial identification	1	4	23	18	59	105	1	1	1	2	15	20
VII:31	visible disability	1	10	24	21	49	105	1	7	3	0	9	20

Section VIII: Possible Changes to the UW Optometry Interview

VIII:1: The UW Optometry Admission Committee should consider:

Item topic	Applicants	Interviewers
leaving the interview unchanged	24	1
subtly revising the interview	62	5
significantly revising the interview	11	10
eliminating the interview	1	1

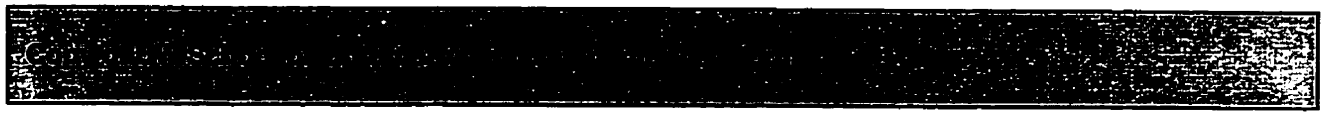
VIII:2-11: The UW Optometry Admission Committee should consider changing:

Item #	Item Topic	Applicants						Interviewers					
		A+	A	N	D	D+	n	A+	A	N	D	D+	n
VIII:2	the interview length (currently 30 minutes)	5	19	10	20	28	82	2	3	5	3	5	18
VIII:3	the number of interviewers (currently 2/interview)	4	8	14	30	26	82	1	2	4	4	6	17
VIII:4	who interviews (currently faculty)	7	16	12	24	22	81	2	8	5	1	2	18
VIII:5	the training requirements for interviewers	9	14	31	17	10	81	11	6	1	0	0	18
VIII:6	the interview's content (i.e., the topics covered)	15	41	10	9	7	82	8	9	1	0	0	18
VIII:7	the style of questions (closed versus open-ended)	9	20	26	15	11	81	3	11	2	1	1	18
VIII:8	the interview's importance in admission decisions	14	21	24	12	8	79	5	8	3	2	0	18
VIII:9	the time allowed for candidate questions	8	20	16	21	16	81	2	3	7	5	1	18
VIII:10	the amount candidates know about interviews	24	31	9	10	6	80	2	4	8	2	1	17
VIII:11	the interview stress level for candidates	15	22	14	20	12	83	1	4	8	3	1	17

Section IX: Possible UW Optometry Interview Biases

Item #	Item Topic	Applicants						Interviewers					
		A+	A	N	D	D+	n	A+	A	N	D	D+	n
IX:1	sexism	2	3	15	20	61	101	1	5	2	6	4	18
IX:2	racism	2	1	16	22	60	101	1	1	3	6	7	18
IX:3	homophobia	1	2	16	19	62	100	1	0	4	6	7	18
IX:4	ageism	2	4	21	18	56	101	1	5	5	5	2	18
IX:5	beautyism	2	4	21	21	53	101	1	5	3	7	2	18

Appendix K: UW School of Optometry Interview Form



ADMISSIONS INTERVIEW FORM
School of Optometry
University of Waterloo

Candidate's Name: _____ Home Province: _____

UW/OUAC #: _____ Date: _____

PLEASE REMEMBER TO WRITE IN PEN, SIGN THE FORM AND MAKE AS MANY COMMENTS AS POSSIBLE. THANK YOU FOR YOUR TIME!

A. Knowledge (practical or intellectual knowledge necessary to become an optometry student or optometrist)

1. What is your academic university background? What portion(s) of your academic experience do you think would be most useful to a career in optometry?
2. What does an optometrist do (practically & intellectually)? How do the optometrist's duties differ from those of an ophthalmologist or optician?
3. What examples/experiences in your life provide you with evidence that you would be successful in the optometry program or profession?
4. What are an optometrist's career options (i.e., practice, academia, industry, government)?
5. What appear to be the positive/negative aspects about a career in optometry? Contrast this to other career options.

B. Problem Solving (the kind of thinking required to solve the problems which the optometry student or optometrist faces)

1. What is the difference between a technician and a clinician?
2. Give an example of how you have had to deal with an angry individual (e.g., customer/client). How would you as an optometrist handle an angry patient in your waiting room?
3. How would you handle negative hearsay from a patient about yourself or another colleague?

C. Accountability (responsibilities of an optometry student or optometrist)

1. What guidelines, procedures, policies and/or manuals are available to guide an optometrist's decision-making and actions (e.g., Associations, Societies, Colleges, Health Disciplines Act)?
2. What group represents the optometrist's interests; the patient's interests?
3. What rules govern a student's behaviour? What are the optometry student's responsibilities to: himself/herself, classmates, patients, the University?

D. Working Conditions (physical effort, physical environment, sensory attention, mental stress)

1. What type of physical demands would an optometry student or optometrist face (e.g., manual dexterity, backstrain)? What examples in your life suggest you have or could develop the skills to cope with these demands?

2. What type of mental/emotional demands would an optometry student or optometrist encounter (exams/licencing/financial)? What examples in your life suggest you have or could develop skills to cope with these demands?

3. What sensory abilities would be most/least important to an optometrist?

Interview Scores (circle one):

1 1.5 2 2.5 3

1 = Strongest Interview Performance
2 = Average Interview Performance
3 = Weakest Interview Performance

Interviewer: _____

Appendix L: Group Comparisons: Purpose

N.B.: PC 1 = provide information, meet faculty, reduce candidate concerns
PC 2 = select candidates, predict OD success, predict student success
PC 3 = promote program, recruit candidates
PC 4 = gather information, gather unique information
PC 5 = clarify information

Table L.1: Perceived Purposes: Applicants Versus Interviewers
Independent t-test (p=0.050)

Prin. Comp.	UW Interview		Ideal Interview		Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(124)} = -1.981$	**0.050**	$t_{(124)} = 1.215$	0.227	$t_{(120)} = 1.262$	0.209
PC 2	$t_{(124)} = 2.457$	**0.015**	$t_{(124)} = 0.122$	0.903	$t_{(120)} = 0.278$	0.782
PC 3	$t_{(124)} = -0.480$	0.632	$t_{(124)} = -0.353$	0.725	$t_{(120)} = -0.441$	0.660
PC 4	$t_{(124)} = -0.449$	0.654	$t_{(124)} = 0.521$	0.604	$t_{(120)} = 0.052$	0.958
PC 5	$t_{(124)} = 2.258$	**0.026**	$t_{(124)} = 0.292$	0.771	$t_{(120)} = -0.197$	0.844

Table L.2: Perceived Purposes: Female Versus Male Applicants
Independent t-test (p=0.050)

Prin. Comp.	UW Interview		Ideal Interview		Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(104)} = 0.870$	0.387	$t_{(105)} = 1.506$	0.135	$t_{(101)} = 1.087$	0.280
PC 2	$t_{(104)} = 0.002$	0.999	$t_{(105)} = -0.750$	0.455	$t_{(101)} = 0.587$	0.559
PC 3	$t_{(104)} = -1.830$	0.070	$t_{(105)} = -1.318$	0.190	$t_{(101)} = -0.295$	0.768
PC 4	$t_{(104)} = 0.321$	0.749	$t_{(105)} = 1.434$	0.154	$t_{(101)} = 1.937$	0.056
PC 5	$t_{(104)} = 0.081$	0.936	$t_{(105)} = 1.687$	0.095	$t_{(101)} = 0.602$	0.548

Table L.3: Perceived Purposes: Internal Versus External Applicants
Independent t-test (p=0.050)

Prin. Comp.	UW Interview		Ideal Interview		Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(104)} = 0.140$	0.889	$t_{(105)} = -0.157$	0.876	$t_{(101)} = -0.541$	0.590
PC 2	$t_{(104)} = 0.665$	0.507	$t_{(105)} = 1.032$	0.304	$t_{(97)} = 2.057$	**0.042**
PC 3	$t_{(104)} = -0.737$	0.463	$t_{(105)} = -0.726$	0.469	$t_{(101)} = -0.907$	0.367
PC 4	$t_{(104)} = 0.756$	0.451	$t_{(105)} = 2.069$	**0.041**	$t_{(101)} = 1.687$	0.095
PC 5	$t_{(104)} = -0.407$	0.685	$t_{(105)} = 0.394$	0.694	$t_{(101)} = 0.431$	0.667

Table L.4: Perceived Purposes: Contract Versus Other Applicants
Independent t-test (p=0.050)

Prin. Comp.	UW Interview		Ideal Interview		Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(104)} = 2.791$	**0.006**	$t_{(105)} = 0.716$	0.475	$t_{(101)} = -1.048$	0.297
PC 2	$t_{(104)} = -1.332$	0.186	$t_{(105)} = 0.015$	0.988	$t_{(97)} = 1.070$	0.287
PC 3	$t_{(104)} = -1.238$	0.219	$t_{(105)} = -1.979$	**0.050**	$t_{(101)} = -2.045$	**0.043**
PC 4	$t_{(104)} = 0.568$	0.571	$t_{(105)} = -0.085$	0.933	$t_{(101)} = 0.587$	0.558
PC 5	$t_{(104)} = 0.369$	0.713	$t_{(105)} = 0.454$	0.651	$t_{(101)} = -0.948$	0.345

N.B.: Bold = statistically significant

Appendix M: Context Comparisons: Purpose

N.B.: PC 1 = provide information, meet faculty, reduce candidate concerns
PC 2 = select candidates, predict OD success, predict student success
PC 3 = promote program, recruit candidates
PC 4 = gather information, gather unique information
PC 5 = clarify information

Table M.1: Perceived Purposes: Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(105)} = 4.930$	**0.000**	$t_{(102)} = -1.516$	0.133
PC 2	$t_{(105)} = 0.056$	0.956	$t_{(102)} = -0.996$	0.321
PC 3	$t_{(105)} = 2.771$	**0.007**	$t_{(102)} = -4.716$	**0.000**
PC 4	$t_{(105)} = 4.791$	**0.000**	$t_{(102)} = -2.140$	**0.035**
PC 5	$t_{(105)} = 7.517$	**0.000**	$t_{(102)} = -2.207$	**0.030**

Table M.2: Perceived Purposes: Interviewers
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(19)} = -0.874$	0.394	$t_{(19)} = -0.769$	0.452
PC 2	$t_{(19)} = 2.384$	**0.028**	$t_{(19)} = -0.807$	0.430
PC 3	$t_{(19)} = 1.323$	0.203	$t_{(19)} = -2.416$	**0.027**
PC 4	$t_{(19)} = 1.448$	0.165	$t_{(19)} = -1.040$	0.312
PC 5	$t_{(19)} = 5.047$	**0.000**	$t_{(19)} = -1.644$	0.118

Table M.3: Perceived Purposes: Female Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(61)} = 4.290$	**0.000**	$t_{(58)} = -0.530$	0.598
PC 2	$t_{(61)} = -0.358$	0.722	$t_{(58)} = -1.478$	0.145
PC 3	$t_{(61)} = 2.581$	**0.012**	$t_{(58)} = -4.733$	**0.000**
PC 4	$t_{(61)} = 4.609$	**0.000**	$t_{(58)} = -1.698$	0.095
PC 5	$t_{(61)} = 6.052$	**0.000**	$t_{(58)} = -0.914$	0.365

Table M.4: Perceived Purposes: Male Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(44)} = 2.637$	**0.012**	$t_{(44)} = -1.917$	0.062
PC 2	$t_{(44)} = 0.549$	0.586	$t_{(44)} = 0.433$	0.667
PC 3	$t_{(44)} = 1.388$	0.172	$t_{(44)} = -1.838$	0.073
PC 4	$t_{(44)} = 2.222$	**0.032**	$t_{(44)} = -1.289$	0.204
PC 5	$t_{(44)} = 4.452$	**0.000**	$t_{(44)} = -2.572$	**0.014**

Table M.5: Perceived Purposes: Internal Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(36)} = 2.858$	**0.007**	$t_{(36)} = -0.491$	0.627
PC 2	$t_{(36)} = 0.383$	0.704	$t_{(36)} = -1.655$	0.107
PC 3	$t_{(36)} = 1.779$	0.084	$t_{(36)} = -2.353$	**0.024**
PC 4	$t_{(36)} = 4.317$	**0.000**	$t_{(36)} = -1.108$	0.276
PC 5	$t_{(36)} = 5.325$	**0.000**	$t_{(36)} = -1.363$	0.182

Table M.6: Perceived Purposes: External Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(69)} = 3.992$	**0.000**	$t_{(66)} = -1.479$	0.144
PC 2	$t_{(69)} = -0.220$	0.826	$t_{(66)} = -0.081$	0.936
PC 3	$t_{(69)} = 2.150$	**0.035**	$t_{(66)} = -4.103$	**0.000**
PC 4	$t_{(69)} = 3.053$	**0.003**	$t_{(66)} = -1.822$	0.073
PC 5	$t_{(69)} = 5.512$	**0.000**	$t_{(66)} = -1.761$	0.083

Table M.7: Perceived Purposes: Contract Applicants
Paired t-test (p=0.050)

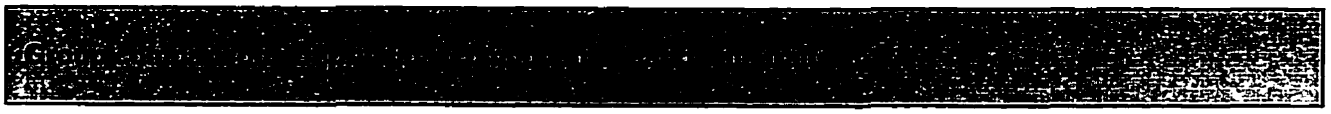
Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(48)} = 3.664$	**0.001**	$t_{(46)} = -3.208$	**0.003**
PC 2	$t_{(48)} = -1.272$	0.210	$t_{(46)} = 0.254$	0.801
PC 3	$t_{(48)} = 2.536$	**0.015**	$t_{(46)} = -2.841$	**0.007**
PC 4	$t_{(48)} = 3.354$	**0.002**	$t_{(46)} = -1.214$	0.231
PC 5	$t_{(48)} = 4.625$	**0.000**	$t_{(46)} = -2.316$	**0.025**

Table M.8: Perceived Purposes: Applicants Excluding Contract
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(57)} = 3.337$	**0.002**	$t_{(56)} = 0.353$	0.726
PC 2	$t_{(57)} = 0.945$	0.349	$t_{(56)} = -1.483$	0.144
PC 3	$t_{(57)} = 1.416$	0.162	$t_{(56)} = -3.762$	**0.000**
PC 4	$t_{(57)} = 3.404$	**0.001**	$t_{(56)} = -1.754$	0.085
PC 5	$t_{(57)} = 5.994$	**0.000**	$t_{(56)} = -0.771$	0.444

N.B.: Bold = statistically significant

Appendix N: Group Comparisons: Candidate Traits



N.B.: PC 1 = scope of practice, duties, accountability, job demands, ethical principles, moral decision making
PC 2 = fashion, beauty, religious affiliation, racial identification, visible disability
PC 3 = adaptability, perseverance, work ethic, perceptiveness, motivation
PC 4 = energy level, presence, body language
PC 5 = planning skills, cooperation, coworker relations, loyalty
PC 6 = communication skills, interpersonal skills, independent judgment
PC 7 = aggressiveness, problem solving skills
PC 8 = creativity, ability to delegate
PC 9 = manual dexterity

Table N.1: Perceived Candidate Traits: Applicants Versus Interviewers Independent t-test (p=0.050)

Prin. Comp.	UW Interview		Ideal Interview		Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(23)} = 0.802$	0.431	$t_{(19)} = 0.984$	0.337	$t_{(118)} = 1.964$	0.052
PC 2	$t_{(119)} = 0.635$	0.527	$t_{(121)} = -0.358$	0.721	$t_{(118)} = -0.009$	0.993
PC 3	$t_{(21)} = 2.937$	**0.008**	$t_{(121)} = 3.051$	**0.003**	$t_{(118)} = 2.934$	**0.004**
PC 4	$t_{(119)} = 1.290$	0.199	$t_{(121)} = 0.928$	0.355	$t_{(118)} = 1.416$	0.159
PC 5	$t_{(119)} = 2.021$	**0.046**	$t_{(121)} = 0.569$	0.570	$t_{(118)} = 1.495$	0.138
PC 6	$t_{(119)} = -1.310$	0.193	$t_{(121)} = -0.850$	0.397	$t_{(118)} = 2.731$	**0.007**
PC 7	$t_{(119)} = -1.718$	0.088	$t_{(121)} = -1.860$	0.065	$t_{(118)} = 0.347$	0.729
PC 8	$t_{(119)} = 2.059$	**0.042**	$t_{(121)} = 1.860$	0.065	$t_{(118)} = 4.881$	**0.000**
PC 9	$t_{(119)} = -1.775$	0.078	$t_{(121)} = -1.625$	0.107	$t_{(118)} = -0.117$	0.907

Table N.2: Perceived Candidate Traits: Female Versus Male Applicants Independent t-test (p=0.050)

Prin. Comp.	UW Interview		Ideal Interview		Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(99)} = 2.015$	**0.047**	$t_{(103)} = 1.768$	0.080	$t_{(100)} = 1.630$	0.106
PC 2	$t_{(99)} = 0.116$	0.908	$t_{(103)} = -0.511$	0.611	$t_{(100)} = -0.717$	0.475
PC 3	$t_{(99)} = 0.898$	0.371	$t_{(103)} = -0.289$	0.773	$t_{(118)} = -1.120$	0.265
PC 4	$t_{(99)} = 0.384$	0.702	$t_{(103)} = 2.000$	**0.048**	$t_{(97)} = 0.522$	0.603
PC 5	$t_{(99)} = -0.649$	0.518	$t_{(103)} = -0.543$	0.588	$t_{(100)} = 0.263$	0.793
PC 6	$t_{(99)} = 1.399$	0.165	$t_{(103)} = 0.280$	0.780	$t_{(100)} = 1.503$	0.136
PC 7	$t_{(99)} = 0.455$	0.650	$t_{(103)} = 0.019$	0.985	$t_{(100)} = 0.123$	0.902
PC 8	$t_{(99)} = 0.342$	0.733	$t_{(103)} = 0.460$	0.646	$t_{(100)} = 0.255$	0.799
PC 9	$t_{(99)} = 1.518$	0.132	$t_{(103)} = 0.595$	0.553	$t_{(99)} = 0.796$	0.428

Table N.3: Perceived Candidate Traits: Internal Versus External Applicants
Independent t-test (p=0.050)

Prin. Comp.	UW Interview		Ideal Interview		Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(99)} = 0.854$	0.395	$t_{(103)} = 1.093$	0.277	$t_{(100)} = -0.381$	0.704
PC 2	$t_{(99)} = -1.165$	0.247	$t_{(103)} = -1.149$	0.253	$t_{(100)} = -1.610$	0.111
PC 3	$t_{(99)} = 0.036$	0.972	$t_{(103)} = -0.938$	0.350	$t_{(100)} = 0.813$	0.418
PC 4	$t_{(99)} = 1.170$	0.245	$t_{(103)} = 1.246$	0.216	$t_{(91)} = 0.015$	0.988
PC 5	$t_{(99)} = -0.191$	0.849	$t_{(53)} = -0.644$	0.522	$t_{(100)} = 0.997$	0.321
PC 6	$t_{(99)} = 2.364$	**0.020**	$t_{(103)} = 2.044$	**0.044**	$t_{(100)} = 1.584$	0.116
PC 7	$t_{(99)} = 1.731$	0.087	$t_{(103)} = 0.648$	0.518	$t_{(100)} = 0.596$	0.552
PC 8	$t_{(99)} = 1.752$	0.083	$t_{(103)} = 1.527$	0.130	$t_{(100)} = 0.008$	0.994
PC 9	$t_{(99)} = 0.826$	0.411	$t_{(103)} = 0.183$	0.856	$t_{(100)} = 1.211$	0.229

Table N.4: Perceived Candidate Traits: Contract Versus Other Applicants
Independent t-test (p=0.050)

Prin. Comp.	UW Interview		Ideal Interview		Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(99)} = 0.511$	0.610	$t_{(103)} = 0.733$	0.466	$t_{(100)} = -0.525$	0.601
PC 2	$t_{(99)} = 0.641$	0.523	$t_{(81)} = -0.785$	0.435	$t_{(100)} = -1.867$	0.065
PC 3	$t_{(99)} = -1.655$	0.101	$t_{(103)} = -0.883$	0.379	$t_{(100)} = 1.242$	0.217
PC 4	$t_{(99)} = 0.251$	0.802	$t_{(103)} = -0.582$	0.562	$t_{(100)} = 0.362$	0.718
PC 5	$t_{(99)} = 0.940$	0.350	$t_{(100)} = -0.876$	0.383	$t_{(100)} = 0.775$	0.440
PC 6	$t_{(99)} = 0.391$	0.697	$t_{(103)} = 1.066$	0.289	$t_{(100)} = 0.524$	0.601
PC 7	$t_{(99)} = -0.095$	0.925	$t_{(77)} = -0.062$	0.951	$t_{(100)} = -0.443$	0.659
PC 8	$t_{(99)} = 0.813$	0.418	$t_{(103)} = 0.587$	0.559	$t_{(100)} = 0.438$	0.663
PC 9	$t_{(99)} = -1.779$	0.078	$t_{(103)} = -1.746$	0.084	$t_{(99)} = -1.203$	0.232

N.B.: Bold = statistically significant

Appendix O: Context Comparisons: Candidate Traits

N.B.: PC 1 = scope of practice, duties, accountability, job demands, ethical principles, moral decision making
PC 2 = fashion, beauty, religious affiliation, racial identification, visible disability
PC 3 = adaptability, perseverance, work ethic, perceptiveness, motivation
PC 4 = energy level, presence, body language
PC 5 = planning skills, cooperation, coworker relations, loyalty
PC 6 = communication skills, interpersonal skills, independent judgment
PC 7 = aggressiveness, problem solving skills
PC 8 = creativity, ability to delegate
PC 9 = manual dexterity

Table O.1: Perceived Candidate Traits: Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(101)} = -7.810$	**0.000**	$t_{(100)} = -0.823$	0.412
PC 2	$t_{(101)} = -6.607$	**0.000**	$t_{(100)} = -0.502$	0.617
PC 3	$t_{(101)} = 7.123$	**0.000**	$t_{(100)} = -1.129$	0.262
PC 4	$t_{(101)} = -0.444$	0.658	$t_{(100)} = 3.793$	**0.000**
PC 5	$t_{(101)} = 8.257$	**0.000**	$t_{(100)} = -2.876$	**0.005**
PC 6	$t_{(101)} = 1.835$	0.070	$t_{(100)} = 2.628$	**0.010**
PC 7	$t_{(101)} = 4.394$	**0.000**	$t_{(100)} = 0.084$	0.933
PC 8	$t_{(101)} = 3.418$	**0.001**	$t_{(100)} = -1.400$	0.165
PC 9	$t_{(101)} = 3.381$	**0.001**	$t_{(100)} = -2.966$	**0.004**

Table O.2: Perceived Candidate Traits: Interviewers
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(16)} = -2.517$	**0.024**	$t_{(18)} = -1.562$	0.137
PC 2	$t_{(16)} = -2.414$	**0.029**	$t_{(18)} = 2.105$	0.051
PC 3	$t_{(16)} = 3.007$	**0.009**	$t_{(18)} = -1.059$	0.305
PC 4	$t_{(16)} = -0.661$	0.519	$t_{(18)} = 1.907$	0.074
PC 5	$t_{(16)} = 4.230$	**0.001**	$t_{(18)} = 0.376$	0.711
PC 6	$t_{(16)} = 3.524$	**0.003**	$t_{(18)} = 1.156$	0.264
PC 7	$t_{(16)} = 3.913$	**0.001**	$t_{(18)} = -0.166$	0.870
PC 8	$t_{(16)} = 4.803$	**0.000**	$t_{(18)} = -0.625$	0.540
PC 9	$t_{(16)} = 3.240$	**0.006**	$t_{(18)} = -2.857$	**0.011**

Table O.3: Perceived Candidate Traits: Female Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(57)} = -5.282$	**0.000**	$t_{(55)} = -0.424$	0.673
PC 2	$t_{(57)} = -5.040$	**0.000**	$t_{(55)} = -1.380$	0.173
PC 3	$t_{(57)} = 5.423$	**0.000**	$t_{(55)} = -1.321$	0.192
PC 4	$t_{(57)} = 0.713$	0.479	$t_{(55)} = 4.023$	**0.000**
PC 5	$t_{(57)} = 5.773$	**0.000**	$t_{(55)} = -2.018$	**0.049**
PC 6	$t_{(57)} = 0.546$	0.588	$t_{(55)} = 1.379$	0.174
PC 7	$t_{(57)} = 3.418$	**0.001**	$t_{(55)} = 0.130$	0.897
PC 8	$t_{(57)} = 2.549$	**0.014**	$t_{(55)} = -1.196$	0.237
PC 9	$t_{(57)} = 2.440$	**0.018**	$t_{(55)} = -2.820$	**0.007**

Table O.4: Perceived Candidate Traits: Male Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(44)} = -5.816$	**0.000**	$t_{(45)} = -0.919$	0.363
PC 2	$t_{(44)} = -4.252$	**0.000**	$t_{(45)} = 0.468$	0.642
PC 3	$t_{(44)} = 4.566$	**0.000**	$t_{(45)} = -0.160$	0.874
PC 4	$t_{(44)} = -1.456$	0.153	$t_{(45)} = 1.467$	0.150
PC 5	$t_{(44)} = 5.900$	**0.000**	$t_{(45)} = -2.041$	**0.047**
PC 6	$t_{(44)} = 2.179$	**0.035**	$t_{(45)} = 2.500$	**0.016**
PC 7	$t_{(44)} = 2.739$	**0.009**	$t_{(45)} = -0.033$	0.974
PC 8	$t_{(44)} = 2.256$	**0.029**	$t_{(45)} = -0.830$	0.411
PC 9	$t_{(44)} = 2.319$	**0.025**	$t_{(45)} = -1.183$	0.243

Table O.5: Perceived Candidate Traits: Internal Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(35)} = -3.006$	**0.005**	$t_{(35)} = 0.113$	0.910
PC 2	$t_{(35)} = -3.544$	**0.001**	$t_{(35)} = -0.112$	0.911
PC 3	$t_{(35)} = 3.851$	**0.001**	$t_{(35)} = -1.770$	0.086
PC 4	$t_{(35)} = 0.948$	0.350	$t_{(35)} = 2.193$	**0.006**
PC 5	$t_{(35)} = 4.291$	**0.000**	$t_{(35)} = -1.885$	0.068
PC 6	$t_{(35)} = 1.168$	0.251	$t_{(35)} = 1.962$	0.058
PC 7	$t_{(35)} = 3.658$	**0.001**	$t_{(35)} = -1.397$	0.172
PC 8	$t_{(35)} = 3.454$	**0.002**	$t_{(35)} = -1.365$	0.181
PC 9	$t_{(35)} = 0.784$	0.439	$t_{(35)} = -2.229$	**0.033**

Table O.6: Perceived Candidate Traits: External Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(66)} = -8.093$	**0.000**	$t_{(65)} = -1.318$	0.192
PC 2	$t_{(66)} = -5.559$	**0.000**	$t_{(65)} = -0.507$	0.614
PC 3	$t_{(66)} = 6.041$	**0.000**	$t_{(65)} = -0.202$	0.840
PC 4	$t_{(66)} = -0.983$	0.329	$t_{(65)} = 2.727$	**0.008**
PC 5	$t_{(66)} = 7.152$	**0.000**	$t_{(65)} = -2.155$	**0.035**
PC 6	$t_{(66)} = 1.405$	0.165	$t_{(65)} = 1.948$	0.056
PC 7	$t_{(66)} = 2.945$	**0.005**	$t_{(65)} = 0.987$	0.328
PC 8	$t_{(66)} = 1.921$	0.059	$t_{(65)} = -0.875$	0.385
PC 9	$t_{(66)} = 3.673$	**0.001**	$t_{(65)} = -1.987$	0.051

Table O.7: Perceived Candidate Traits: Contract Applicants
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(44)} = -6.977$	**0.000**	$t_{(42)} = -0.830$	0.411
PC 2	$t_{(44)} = -4.777$	**0.000**	$t_{(42)} = 1.784$	0.082
PC 3	$t_{(44)} = 5.694$	**0.000**	$t_{(42)} = -1.242$	0.221
PC 4	$t_{(44)} = 0.424$	0.674	$t_{(42)} = 3.071$	**0.004**
PC 5	$t_{(44)} = 6.005$	**0.000**	$t_{(42)} = -1.006$	0.320
PC 6	$t_{(44)} = 0.879$	0.384	$t_{(42)} = 1.060$	0.295
PC 7	$t_{(44)} = 2.425$	**0.020**	$t_{(42)} = 0.878$	0.385
PC 8	$t_{(44)} = 1.959$	0.057	$t_{(42)} = -0.878$	0.385
PC 9	$t_{(44)} = 2.786$	**0.008**	$t_{(42)} = -1.939$	0.060

Table O.8: Perceived Candidate Traits: Applicants Excluding Contract
Paired t-test (p=0.050)

Prin. Comp.	Ideal Interview - UW Interview		Ideal Interview- Ideal Committee	
	$t_{(DF)}$ value	p value	$t_{(DF)}$ value	p value
PC 1	$t_{(57)} = -4.754$	**0.000**	$t_{(58)} = -0.356$	0.723
PC 2	$t_{(57)} = -4.628$	**0.000**	$t_{(58)} = -2.061$	**0.044**
PC 3	$t_{(57)} = 4.516$	**0.000**	$t_{(58)} = -0.476$	0.636
PC 4	$t_{(57)} = -0.825$	0.413	$t_{(58)} = 2.386$	**0.020**
PC 5	$t_{(57)} = 5.766$	**0.000**	$t_{(58)} = -2.804$	**0.007**
PC 6	$t_{(57)} = 1.656$	0.103	$t_{(58)} = 2.783$	**0.007**
PC 7	$t_{(57)} = 3.893$	**0.000**	$t_{(58)} = -1.231$	0.223
PC 8	$t_{(57)} = 2.794$	**0.007**	$t_{(58)} = -1.083$	0.283
PC 9	$t_{(57)} = 2.074$	**0.043**	$t_{(58)} = -2.264$	**0.027**

N.B.: Bold = statistically significant

Appendix P: UW Admission Variable Weights In Decisions

A) Proportion of Actual Class Selected by Hypothetical Selection Methods

Table P.1: Proportion of Actual Class Selected by Hypothetical Methods: '92 to '96

Selection Method	1992	1993	1994	1995	1996	Mean	Percent
Actual Class	60	60	60	60	60	60.0	100.0%
Median Score (MdS) Class	47	44	45	49	43	45.6	76.0%
Overall Mean (OM) Class	47	43	43	48	42	44.6	74.3%
Prerequisite Mean (PM) Class	43	42	42	47	47	44.2	73.7%
OAT Score Class	31	31	25	29	26	28.4	47.3%
Most # Pre-requisites (PRE) Class	23	22	15	15	26	20.2	33.7%
Mean Interview Score (MIS) Class	38	24	28	32	34	31.2	52.0%
Autobiographic Sketch (ABS) Class	38	39	39	38	41	39.0	65.0%

Table P.1 Summary: If the classes between 1992 and 1996 had been selected based on the top 60 performers in only one selection variable, then the greatest agreement between the Actual Classes selected and these hypothetical classes would be for those which were selected using the university/college transcript performance measures (>73% of the class membership would be the same). Decreasing proportions of the Actual Class would be selected by the: ABS Class, MIS Class, OAT Class and PRE Class. As expected, postsecondary performance appears to be weighted more than other admission variables in making admission decisions. Just over 50% of the Actual Class obtained one of the top 60 interview scores suggesting interview scores are weighed less than some of the other selection variables such as postsecondary performance.

B) Candidate Performance Relative to Admission Decision Timing: '92 to '96

N.B. Only admission decisions made during the second admission decision were considered because the first admission meeting involved only internal applicants. Bolded p values indicate statistical significance.

Table P.2: Last 10 Offers vs. First 10 Offers of 2nd Meeting: 1992 to 1996 Combined Wilcoxon 2-Sample Test (p=0.050)

Variable Compared	$z_{(DF)}$ Value	p Value
Mean Interview Score (MIS)	$z_{(1)} = -2.185$	**0.029**
Interviewer Score Difference (ISD)	$z_{(1)} = 1.942$	0.052
Overall Mean (OM)	$z_{(1)} = -8.507$	**0.000**
Number of 8 Recommended Prerequisites Completed	$z_{(1)} = 5.886$	**0.000**
Optometry Admission Test (OAT) Score	$z_{(1)} = -3.144$	**0.002**
Autobiographic Sketch Score (ABS)	$z_{(1)} = -0.622$	0.534

Table P.2 Summary: In the second meeting, applicants receiving the last 10 offers had significantly better interview scores, more completed recommended prerequisites, lower transcript means, and lower OAT scores than the applicants receiving the first 10 offers.

Table P.3: Last 10 Offers vs. Contingency Decisions: 1992 to 1996 Combined
Wilcoxon 2-Sample Test (p=0.050)

Variable Compared	$z_{(DF)}$ Value	p Value
Mean Interview Score (MIS)	$z_{(1)} = -0.281$	0.779
Interviewer Score Difference (ISD)	$z_{(1)} = 1.156$	0.248
Overall Mean (OM)	$z_{(1)} = 1.804$	0.071
Number of 8 Recommended Prerequisites Completed	$z_{(1)} = 0.979$	0.328
Optometry Admission Test (OAT) Score	$z_{(1)} = 1.767$	0.077
Autobiographic Sketch Score (ABS)	$z_{(1)} = -1.904$	0.057

Table P.3 Summary: In the second meeting, applicants receiving the last 10 offers did not perform significantly different than applicants on the contingency list according to these measures.

Table P.4: Last 10 Offers vs. 10 Refusals with Same OM: 1992 to 1996 Combined
Wilcoxon 2-Sample Test (p=0.050)

Variable Compared	$z_{(DF)}$ Value	p Value
Mean Interview Score (MIS)	$z_{(1)} = -2.493$	**0.013**
Interviewer Score Difference (ISD)	$z_{(1)} = 0.623$	0.533
Overall Mean (OM)	$z_{(1)} = 0.142$	0.887
Number of 8 Recommended Prerequisites Completed	$z_{(1)} = 6.083$	**0.000**
Optometry Admission Test (OAT) Score	$z_{(1)} = 0.739$	0.460
Autobiographic Sketch Score (ABS)	$z_{(1)} = -2.970$	**0.003**

Table P.4 Summary: In the second meeting, applicants receiving the last 10 offers had significantly better interview scores, more completed recommended prerequisites, and better autobiographic sketch scores than the applicants refused with the same overall mean.

Summary of Appendix P

The admission interview scores are not weighted as heavily as other selection variables such as postsecondary performance when making admission decisions. The attention paid to interview performance does appear to change during the meeting. It appears that superior interview performance is more important late rather than early in the admission meeting and superior interview performance may contribute to an applicant receiving one of the last few offers in the class.

Appendix Q: On-site Versus Off-site UW Interview Scores

Table Q.1: Mean Interview Score (MIS): 1992 To 1996 Combined

Applicant Group	Site Location	# with MIS 1.0 to 1.5	# with MIS 1.75 to 2.25	# with MIS 2.5 to 3.0	n
All	On-site	241	188	20	449
	Off-site	42	230	20	292
Eligible	On-site	233	178	20	431
	Off-site	37	195	15	247
Admit	On-site	125	78	2	205
	Off-site	18	61	0	79

N.B.: **Bold** = highest frequency for site condition.
On-site = interviews conducted at UW (varied interviewer teams).
Off-site = interviews conducted in contract provinces (same interviewer team).
All = All interviewed applicants from 1992 to 1996 (n=741).
Eligible = All interviewed eligible applicants from 1992 to 1996 (n=678)
Admit = All interviewed admitted applicants from 1992 to 1996 (n=284)

Table Q.2: On-site Versus Off-site MIS
Chi-Squared Test (p=0.050)

Group Compared	$\chi^2_{(DF)}$ Value	p value
All: on-site vs. off-site	$\chi^2_{(2)} = 116.100$	**0.000**
Eligible: on-site vs. off-site	$\chi^2_{(2)} = 101.296$	**0.000**
Admit: on-site vs. off-site	$\chi^2_{(2)} = 35.162$	**0.000**

Summary of Tables Q.1 & Q.2: There was a significant difference between the distributions of on-site and off-site MIS with the on-site scores being skewed towards higher interview scores and the off-site scores centering more towards average values. Working together may have caused the off-site interviewers to develop common evaluation criteria. A comparison of interviewed eligible applicants was included because off-site interviews are provided to both eligible and non-eligible applicants while on-site interviews are provided only to eligible applicants. A comparison of interviewed admitted applicants was included to look for evidence that the distribution of MIS may be skewed more positively among admitted applicants.

Table Q.3: Interviewer Score Difference (ISD): 1992 To 1996 Combined

Applicant Group	Site Location	# with ISD 0.0 to 0.5	# with ISD 1.0 to 2.0	n
All	On-site	407	42	449
	Off-site	289	3	292
Eligible	On-site	391	40	431
	Off-site	244	3	247
Admit	On-site	188	17	205
	Off-site	78	1	79

Table Q.4: On-site Versus Off-site ISD
Chi-Squared Test (p=0.050)

Group Compared	$\chi^2_{(DF)}$ Value	p value
All: on-site vs. off-site	$\chi^2_{(1)} = 21.507$	**0.000**
Eligible: on-site vs. off-site	$\chi^2_{(1)} = 17.199$	**0.000**
Admit: on-site vs. off-site	$\chi^2_{(2)} = 4.743$	**0.029**

Summary of Tables Q.3 & Q.4: There was a significant difference between the distributions of on-site and off-site ISDs with there being greater interviewer agreement (smaller ISDs) than for the on-site interviewers than for the off-site interviewers. Working together may have caused the off-site interviewers to develop similar evaluation criteria.

Appendix R: Predictive Value of Admission Variables

Table R.1: Admission and Optometry Performance: 1992 to 1996 Combined

Admission Measure	n	Mean	SD	Optometry Measure	n	Mean (%)	SD (%)
Overall Mean (OM)	299	84.2	3.7	Year 1 Mean (Y1M)	300	76.4	5.3
OAT Score (OAT)	300	367	22	Year 2 Mean (Y2M)	237	78.2	5.1
Autobio. Score (ABS)	300	7.0	0.9	Year 3 Mean (Y3M)	177	76.9	4.0
Interview Score (MIS)	284	1.6	0.4	Year 4 Mean (Y4M)	118	79.5	2.9
				Overall Mean (OoM)	118	77.5	3.7
				Year 3 Clinic (Y3C)	177	78.4	2.8
				Year 4 Clinic (Y4C)	118	79.3	2.8

Table R.2a: Correlation of Admission with Optometry Measures: '92 to '96 Combined
Pearson Correlation Coefficients (p=0.050)

	Academic Admission Measures			
Optometry Measures	OM		OAT	
	$r_{(DF)}$ value	p value	$r_{(DF)}$ value	p value
Y1M	$r_{(299)} = 0.449$	**0.000**	$r_{(300)} = 0.286$	**0.000**
Y2M	$r_{(236)} = 0.462$	**0.000**	$r_{(237)} = 0.240$	**0.000**
Y3M	$r_{(177)} = 0.467$	**0.000**	$r_{(177)} = 0.164$	**0.030**
Y4M	$r_{(118)} = 0.270$	**0.003**	$r_{(118)} = 0.043$	**0.043**
OoM	$r_{(118)} = 0.520$	**0.000**	$r_{(118)} = 0.190$	**0.039**
Y3C	$r_{(177)} = 0.198$	**0.008**	$r_{(177)} = 0.042$	0.581
Y4C	$r_{(118)} = 0.257$	**0.005**	$r_{(118)} = 0.044$	0.636

Summary of Table R.2a: The university transcript overall mean (OM) correlated positively with academic and clinical performance in the optometry program while the OAT score correlated positively with academic performance only.

Table R.2b: Correlation of Admission with Optometry Measures: '92 to '96 Combined Pearson Correlation Coefficients (p=0.050)

Optometry Measures	Non-Academic Admission Measures			
	ABS		MIS	
	$r_{(DF)}$ value	p value	$r_{(DF)}$ value	p value
Y1M	$r_{(300)} = -0.081$	0.161	$r_{(284)} = 0.046$	0.440
Y2M	$r_{(237)} = -0.111$	0.087	$r_{(223)} = -0.020$	0.770
Y3M	$r_{(177)} = -0.113$	0.135	$r_{(165)} = -0.046$	0.554
Y4M	$r_{(118)} = -0.040$	0.669	$r_{(109)} = -0.014$	0.883
OoM	$r_{(118)} = -0.125$	0.179	$r_{(109)} = 0.076$	0.076
Y3C	$r_{(177)} = -0.061$	0.417	$r_{(165)} = -0.131$	0.094
Y4C	$r_{(118)} = -0.035$	0.703	$r_{(109)} = -0.024$	0.801

Summary of Table R.2b: Neither the autobiographic sketch score (ABS) nor the mean interview score (MIS) correlated with academic or clinical performance in the UW optometry program.

N.B.: Bold = statistically significant

Appendix S: Estimated 1996 UW Interview Costs

Table S.1: Hard Costs of Providing Interviews (i.e., expenditures incurred)

Travel costs for two off-site interviewers (e.g., transportation, accommodation, meals)	10,440
Stationary costs for interview forms and correspondence with interview site personnel	30
Total	**$10,470**

Table S.2: Soft Costs of Providing Interviews (i.e., human costs)

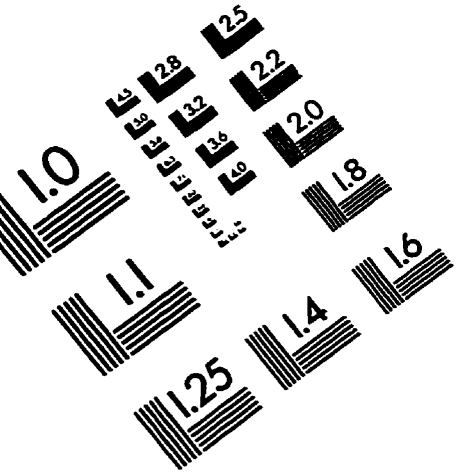
On-site interviewer time (95 interview hours x *$45/hr)	4,275
Off-site interviewer time (2 faculty x 6 days x 8 hours x *$45/hr)	4,320
Administrative staff time: schedule interviews as well as input & proof read data	1,400
Total	**$9,995**

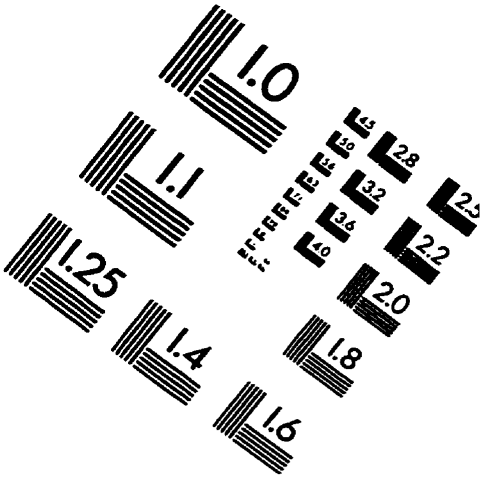
* $45/hr was used to represent the estimated hourly faculty salary including benefit costs.

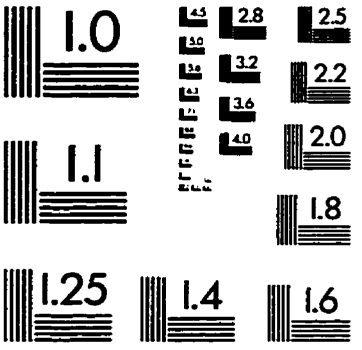
N.B.: These estimated costs, in particular the travel costs, would vary yearly; a margin of error of $1,000 would be reasonable (having examined travel costs in the past four years, the 1996 costs were lower than average). It is acknowledged that this cost estimate has not considered the applicant costs (i.e., travel costs or time lost from their summertime jobs). It should be noted that some of the travel costs to the School are offset by the tripartite financial agreements with some of the provinces.

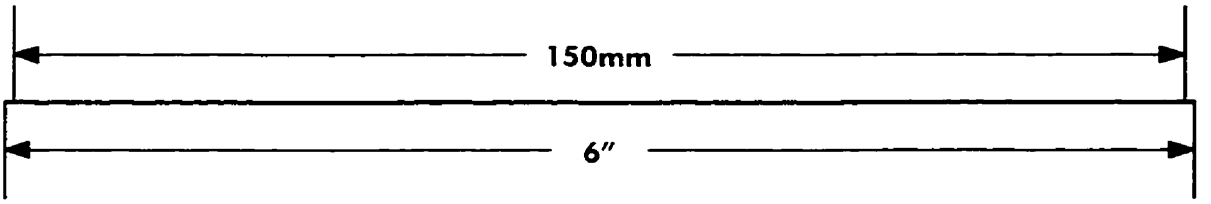
Summary of S.1 & S.2: If one considers the expenditures (the hard cost) and the cost of UW personnel taking time away from their other duties (the soft cost), the annual cost of the UW interview exceeds $20,000.

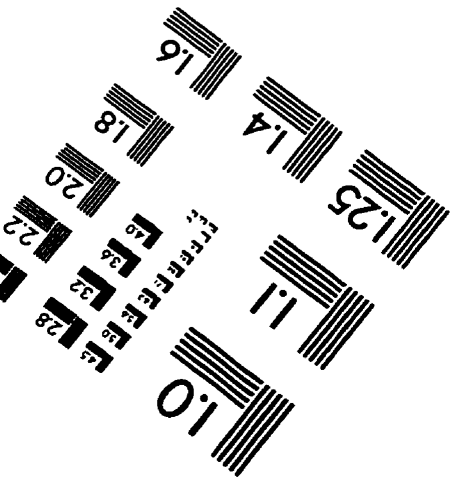
IMAGE EVALUATION
TEST TARGET (QA-3)

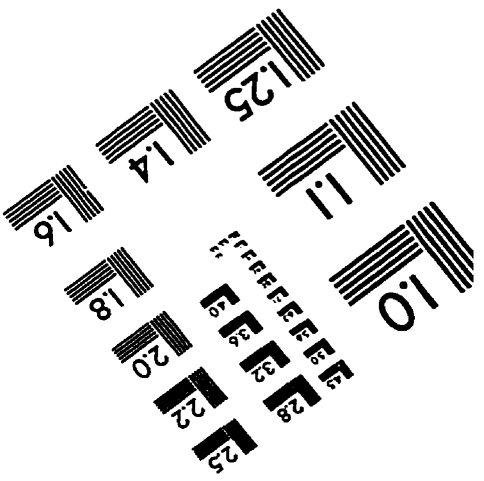












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