

Adjustment to Retirement of Horse Racing Jockeys

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Declaration

“I, Daniel Lynch, declare that the Master by Research thesis entitled, Adjustment to Retirement of Horse Racing Jockeys, is no more than 60,000 words in length, exclusive of tables, figures, appendices, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work”.

Signature

Date

## Abstract

Retirement from sport can be a problematic and traumatic experience for athletes. Retirement from professional horse racing can be particularly distressful for jockeys. This thesis describes how former professional jockeys' adjusted to retirement. The participants in the present study were 72 retired jockeys, who had been retired between one and forty-one years. Retired jockeys were examined in relation to physical, mental, and social adjustment to retirement. Adjustment was also assessed for the different forms of retirement, namely, voluntary and involuntary retirement. Adjustment to retirement of involuntarily retired jockeys was also examined according to length of retirement, that is, less than 10 years, between 10 and 20 years, and greater than 20 years. Adjustment to retirement was measured using the Retired Jockeys Questionnaire (Speed et al., 2001). Descriptive analysis indicated that retired jockeys experienced physical health problems (e.g., back, hip, arthritis), and mental problems (e.g., forming an identity outside the racing industry, emotional distress). In addition, jockeys experienced social problems (e.g., losing contact with friends within the racing industry, maintaining a social life within the racing industry). Inferential analysis was used to identify differences between the retirement experiences of voluntarily and involuntarily retired jockeys. In all cases, jockeys who retired involuntarily reported more health problems than jockeys who retired voluntarily. Specifically, differences between voluntary and involuntary retirees were found for arthritis,  $F(1, 71) = 4.59, p < .001, d = 1.39$ , osteoporosis,  $F(1, 71) = 3.74, p < .001, d = .82$ , immune system,  $F(1, 71) = 3.73, p < .001, d = .79$ , and kidney problems,  $F(1, 71) = 3.62, p < .001, d = 0.77$ . Involuntary retirement was associated with a higher reported level of problems

universally. Differences between the voluntary and involuntary retirees were also found for mental health issues, specifically for, identity difficulties leaving the racing industry,  $F(1, 71) = -2.99, p < .004, d = 1.22$ , and identity opportunities,  $F(1, 71) = -2.31, p < .024, d = 0.94$ . Jockeys who retired involuntarily also experienced greater problems with social issues. There was a significant difference between voluntary and involuntary retirees for social support from friends,  $F(1, 71) = -1.95, p < .001, d = 0.78$ , social support from family,  $F(1, 71) = -1.85, p < .001, d = 0.74$ , social support from other jockeys  $F(1, 71) = -2.57, p < .001, d = 1.04$ , social support from the racing industry  $F(1, 71) = -3.68, p < .001, d = 1.50$ , social isolation  $F(1, 71) = -2.32, p < .001, d = 0.93$ , and social difficulties with old racing friends  $F(1, 58) = -2.26, p < .030, d = 0.91$ .

Differences were found between the three groups of involuntarily retired jockeys, for joint problems,  $F(1, 58) = 2.70, p < .08, R^2 = .081$ , and back problems,  $F(1, 58) = 1.20, p = .30, R^2 = .039$ , showing that those jockeys retired for less than 10 years and those retired more than 20 years reported more problems than those jockeys who had been retired for between 10 and 20 years. There were differences for mental health issues between the three involuntarily retired groups, particularly for those jockeys who had been retired for between 10 and 20 years, who experienced more problems with identity after leaving the racing industry, than those jockeys retired for less than 10 years or greater than 20 years. There were differences between the three retirement groups with respect to social issues, specifically family relationship difficulties,  $F(1, 58) = 2.90, p < .06, R^2 = .089$ , whereby those jockeys who had been retired for less than 10 years reported experiencing more problems. The results indicate that the type of retirement experience, voluntary or involuntary and the length of involuntary retirement had an influence on the adjustment to retirement for jockeys. Implications for professional and

applied work in the area of career termination are discussed, and suggestions are made regarding future research on career transitions from sport.

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## CHAPTER 1: INTRODUCTION

Athletic participation comprises many powerful and lasting experiences. Perhaps the most unique and inevitable experience is retirement from sport. Although transition into retirement may be predictable or unpredictable, individual differences exist in sport retirement and retirement from elite sport can be a traumatic and negative event (McPherson, 1980; Wylleman & Lavallee, 2004), or an experience of social rebirth (Coakley, 1983).

Horse racing is an immensely popular and exciting sport, however, it is different to many other sports in noteworthy ways. Unlike many other sports, horse racing is culturally diverse. Horse racing is an international, multi-billion dollar industry, that takes place over a 12-month season, on all weather tracks, and is accessible to all classes of people within society (Turner, McCrory, & Halley, 2002). Furthermore, the life of the horse racing athlete, the jockey, is also unusual, even by elite sport standards. Meeting weight requirements, full time physical, mental, and social commitments to daily training/track work and racing, a 12-month season, and high injury rates equate to horse racing being a unique and demanding sport for jockeys (Turner, McCrory & Halley). Retirement from riding may be a stressful event characterised by limited employment opportunities, financial hardship, poor physical health, and emotional distress (Speed, Seedsman, & Morris, 2001). Heavy involvement in racing from an early age, meeting the stringent demands of riding, isolation from many facets of society, and lack of opportunity to establish support links or resources to help in retirement, the transition experience of retirement from riding may be even more exaggerated than 'typical' retirement from elite sport.

Retirement from elite sport generally is associated with adjustment problems (Grove, Lavalley, & Gordon, 1997; Lavalley & Wylleman, 2000). These problems may cause distress manifesting itself physically, mentally, or socially (Taylor & Ogilvie, 2001). Few studies, however, have focused on the adjustment to retirement for jockeys. Several authors (Lippincott-Williams & Williams, 2001; Speed, Seedsman, & Morris, 2001; Turner, et al., 2002) have suggested that retirement from riding is often problematic. Consequently, there is a need for further study of the impact of retirement of horse racing jockeys.

The type of retirement context needs to be taken into account in order to understand the entire retirement experience of the athlete (Wylleman & Lavalley, 2004). The adjustment experiences of athletes following retirement may depend on the type and consequences of retirement from sport, namely voluntary retirement (e.g., free choice) or involuntary retirement (e.g., injury, illness, or deselection). Researchers in other sports suggest that the adjustment process depends on several causal factors, including the type of retirement, voluntary or involuntary (Avery & Jablin, 1998; Baillie, 2002; Fortunato, Anderson, Morris, & Seedsman, 1995; Gordon, 1995; Ogilvie & Taylor, 1993). Hence, there is a need to examine the effects of voluntary and involuntary retirement on retirement from riding for horse racing jockeys.

The effects of retirement may be long lasting, depending on the developmental level, or stage of the athlete (Wylleman & Lavalley, 2004). It might be expected that the longer a jockey is retired, the better the adjustment. There are, however, no studies of retirement from riding that have examined the effects retirement has on jockeys over extended periods (Lippincott-Williams & Williams, 2001; Speed, Seedsman, & Morris, 2001; Turner, McCrory, & Halley, 2002). Furthermore, studies that examine adjustment

to retirement over time from other sports are limited (Kleiber & Brock, 1992; Kleiber, Greendorfer, Blinde, & Samdahl, 1987). Consequently, it would be valuable to examine the effects of length of retirement on levels of adjustment and difficulties experienced in retirement from riding.

Termination from sport involves a variety of unique experiences that sets it apart from workforce retirement. The culture associated with some sports, like horse racing, sets them apart as even more intense environments in which to live and work, and from which to retire. The purpose of this thesis was to examine retirement experiences, especially adjustment to retirement for jockeys. A further purpose was to examine the effect of voluntary and involuntary retirement on adjustment to retirement, and, to examine the effect of length of retirement on adjustment experienced during retirement.

## CHAPTER 2: LITERATURE REVIEW

In this chapter, I examine definitions of retirement from sport and then consider a number of theories of retirement from sport. Next, I discuss research on retirement from sport, including general retirement from sport, voluntary and involuntary retirement, duration of retirement, and, jockey specific retirement research.

### Definitions of Retirement

Retirement has been identified as a significantly stressful event and generally conceptualized as a major life crisis (Lo & Brown, 1999). A broad definition of retirement was proposed by Bond (1976) as “any ‘stepping down’ from an occupation, even if an individual moves to another type of work” (p. 272). According to Agarwal (1998), retirement is clearly one of the most important social factors in ageing. Retirement affects the way elders spend their time, their income, social interaction, and can affect physical and mental health, self-esteem, and life satisfaction (Agarwal, 1998).

As in the general workforce, sport involvement also represents a vocation, because the role often reflects a serious commitment and pre-occupation for ten years or more duration (Webb, Nasco, Riley, & Headrick, 1998). The longevity of athletic careers can vary from sport to sport, but all athletes face the inevitability of career termination (Webb et al., 1998). According to Ogilvie and Taylor (1993), retirement from sport is also similar to retirement from the workforce, because it can be conceptualised as a complex interaction of stressors, including financial, social, psychological, and physical stressors that may produce cognitive, emotional, behavioural, and/or social trauma. Retirement may also be voluntary or involuntary.

According to Chow (2001), “retirement from sport is the event which marks some period of life between elite sports competition and the life into which a former athlete settles” (p. 3).

Retirement from the workforce may be classified as either voluntary or involuntary. Voluntary retirement occurs when individuals decide to and actually stop work of their own free will (Lowe, 1991). According to Agarwal (1998), a substantial proportion of older adults retiring from the workforce in this category, look forward to, make plans for, and enjoy retirement. Involuntary retirement from the workforce is brought on by circumstances beyond the control of the individual (Lowe, 1991). Inability to adapt to new employment conditions, statutory retirement age and chronic ill-health, are examples of involuntary retirement from the workforce. Similarly, causes for termination of an athletic career are often labelled as voluntary and involuntary (Taylor & Ogilvie, 2001). Athletes who freely choose to end their career are considered voluntary retirees (Ogilvie & Howe, 1982). Age, deselection, and injury, however, are common causes of involuntary retirement for athletes.

In a study of workforce retirees, Roadburg (1985) found that voluntary retirees were more likely to be satisfied than forced retirees. According to Taylor and Ogilvie (2001), whatever the cause of retirement in sport, each individual faces a period of adjustment during the transition from athlete to ex-athlete. In fact, many researchers have found that regardless of the type of retirement, athletes do experience difficulty in the sports retirement process (Brewer, Van Raalte, & Linder, 1993, Ogilvie & Howe, 1982; Pearson & Petitas, 1990). Sinclair and Orlick (1993) proposed that every career termination has the potential to be a crisis, relief, or combination of both, depending on the athlete’s perception of the situation. In support of this position, Taylor and Ogilvie

suggested that retirement may lead to growth and development or to isolation and decline.

The prevention of career termination crises may begin in the early stages of athletic development. Successful retirements require preparation and planning, including a definite date when an individual may expect to alter their way of life, according to a plan. The advantage of workforce retirement in many ways is that, generally workers have known the approximate date of retirement and, therefore, have sufficient time to prepare for the event. According to Agarwal (1998), for workforce retirement to be successful, there is a need for individuals to develop interests outside their regular job, that contribute to personality development, physical well-being, and the cultivation of personal aspirations. Social and educational, as well as economic, pressures have been brought to bear on individuals to help them prepare for retirement. Now that developed nations are removing statutory retirement and encouraging people to work longer to help cope with an ageing population, it will be interesting to see whether workforce retirement problems increase or decrease.

A significant contributor to the reaction of athletes to career termination is the lack of pre-retirement planning. Blinde and Greendorfer (1985) suggested that athletic pre-retirement planning may not occur for many athletes and that retirement may, thus, be involuntary. Research indicates that 14-32% of athletes have their careers prematurely ended because of injury (Allison & Meyer, 1988; Hare, 1971; Svoboda & Vanek, 1982; Werthner & Orlick, 1986). According to Mihovilovic (1968), athletic performance will decrease and retirement is inevitable due to the natural physical deterioration that accompanies middle age. The age at which this typically occurs will vary from sport to sport, depending on the characteristics of the activity. Retirement

from sport may also limit opportunities the athlete has to develop diverse self and social identities and impede their access to social support (Rees & Hardy, 2000; Taylor & Ogilvie, 2001). Further, Gorbett (1985) noted that retirement means the inevitable loss of a collaborative approbation. The loss of collective recognition and praise from family, teammates, other athletes, and society at large is a loss that many athletes feel is unlikely to ever be reclaimed in other, less visible, arenas.

The reasons for retirement from sport are many and they seem to play a crucial role in the adjustment to post-career life. Ogilvie and Taylor (1993) described sport retirement as a complex interaction of stressors, that include financial, social, psychological, and physical stressors that may produce some form of cognitive, emotional, behavioural, and/or social trauma. These stressors may be voluntary or involuntary, and are fundamental issues that are pertinent to retirement from sport. I will use Ogilvie and Taylor's definition of sport retirement in this thesis because in this study I am examining the interaction of physical, social, and emotional stressors on retired athletes.

### Theories of Retirement

A range of theories and models of retirement have been applied in athlete retirement research in order to understand the retirement process. Sport theoreticians have identified similarities between the processes of retirement from sport and social gerontological models of aging, thanatological models of death and dying, and models of human adaptation to transition.

### *Gerontology*

Gerontology has been defined as the systematic analysis of the ageing process (Atchley, 1991). Gerontology is used to look at aging from two points of view: how aging affects the individual and how an aging population will change society (Novak, 1988). Gerontology, when related to retirement from sport, considers life satisfaction following retirement as being dependent on how characteristics of the sport experience impact on the individual and how the process affects the sporting society (Ogilvie & Taylor, 1994). Some sport psychologists (Greendorfer & Blinde, 1985) have suggested that a number of social gerontological approaches are appropriate to the study of retirement from sports including disengagement theory, activity theory, continuity theory, and social breakdown theory.

### *Disengagement Theory*

In disengagement theory, Cummings, Dean, Newell, and McCaffrey (1960) suggested that retirement should be viewed as a necessary manifestation of the mutual withdrawal from society of individuals in the ageing population and by society from those who retire. Cummings et al. (1960) proposed that this withdrawal is universal, as well as inevitable. According to this perspective, those who accept the withdrawal process will successfully adapt to aging, whereas those who do not engage with the withdrawal process will find it difficult to adapt to old age. Second, disengagement is good for society, because it can gradually transfer the functions previously performed by the aged to the young. Thus, society avoids the problems caused by increasing incompetence or sudden death of the aged and the elderly can enjoy their remaining years in leisure. Both concepts involved in the disengagement theory, the withdrawal

process and the transfer of roles from retirees to younger workers can be applied to retirement from sport. First, during the withdrawal process, it has been proposed that athletes, who accept the inevitability of retirement, often adapt successfully to retirement, whereas those who do not disengage or accept the withdrawal process experience a difficult time coping with retirement (Ogilvie, 1982). Second, the transfer of roles from older to the younger people can be applied to sport, whereby younger athletes are given an opportunity to perform in place of older, retired athletes. From the team's perspective, this could enhance overall performance, just as society benefits from fresh young workers.

According to Gordon and Lavalley (2001), disengagement theory is limited in an application sense, because it does not provide the mechanisms to predict whether disengagement will occur. Blinde and Greendorfer (1985), stated that disengagement theory offers little to the understanding of retirement from competitive sport. In support of this, Lerch (1981) demonstrated that a large number of athletes try to hang onto their sport, and that mutual withdrawal of athletes and the sport structure typically does not occur.

#### *Activity Theory*

According to Havighurst (1963), activity theory is the direct opposite of the disengagement theory. Activity theory states that disengagement is not inevitable, except shortly before death. Furthermore, Havighurst and other activity theorists (Burgess, 1960) argued that activity, rather than disengagement is good for the individual and society and that high activity and maintenance of roles are positively related to self-concept and high satisfaction. Similarly, in terms of athletic career termination,

McPherson (1980) proposed that for the adjustment process to be successful, active roles that are lost upon retirement must be exchanged for new ones. According to Lavallee (2001), activity theory may not apply universally to athletic career termination, because there is usually neither a cessation of work activity, nor total retirement from participation. Further, Baillie and Danish (1992) suggested that an athlete's activity patterns cannot be directly compared to society's normal activity patterns.

### *Continuity Theory*

Proposed by Atchley (1976), continuity theory is neither clearly different from disengagement or activity theory. Continuity theory allows change to be integrated without necessarily causing disequilibrium. Atchley proposed that the best adjusted individuals are those who experience minimal change and greater continuity following retirement from the workforce.

In terms of athletic career retirement, it has been proposed that continuity theory can also predict the level of adjustment to retirement by examining the significance of sport in the lives of athletes (Lerch, 1981). In the application of continuity theory to retirement from sport, if one's athletic role is seen as more meaningful than other life roles, the athlete may need to continue in a sport-related role (e.g. coach, commentator, administrator). If the athlete stays connected to sports, and income remains relatively stable after retirement, the level of subjective and behavioural commitment to sport is maintained (Wylleman, 2001). In a study of professional basketball players, Lerch (1981) found, however, that no continuity variables were significantly related to adjustment to retirement from sport.

*Social Breakdown Theory*

Developed by Kuypers and Bengston (1973), social breakdown theory is based on the view that with any role loss (e.g., retirement), individuals become susceptible to external labelling and tendencies to withdraw from activities develop. In relation to sport, Rosenberg (1981) suggested that external labeling and withdrawal may lead the athlete to withdraw further from their sport and internalise negative evaluation, so the individual may lose social ties, suffer displacement, or experience anxiety. Rosenberg (1981) suggested that social breakdown theory is perhaps the most salient social gerontological theory. Furthermore, Gordon (1995) stated that the application of social breakdown theory can help minimise the potential for social breakdowns and smooth out the transition period through a “social reconstruction”. According to Gordon and Lavallee, “social reconstruction” is proposed to restore and maintain positive self-image through counselling and engagement in alternative activities that enhance self-reliance.

Social gerontological theories have been criticised as inadequate when applied to athletic retirement (Greendorfer & Blinde, 1985; Rotella & Heyman, 1993). There is often the assumption that athletes are forced to disengage from their sport, when there are many athletes who retire voluntarily (Werthner & Orlick, 1986). There is also the presumption that the career transition process is an inherently negative event, requiring considerable adjustment for all who experience retirement (Coakley, 1983). According to Allison and Meyer (1988) and Coakley (1983), however, some sport retirees view athletic retirement as opportunistic and liberating. Greendorfer and Blinde (1985) suggested that this is particularly true for those who have undertaken anticipatory forms

of socialisation that facilitate movement into new roles (e.g., reprioritising of interests, developing of alternative skills).

### *Thanatology*

Thanatology is the study of the processes of death and dying (Aiken, 2001). According to Lerch (1982), thanatology refers to a form of social withdrawal and rejection from an individual's primary affiliation group. Two social thanatological theories, namely, Awareness Context and Stages of Dying are often applied to the study of retirement.

### *Awareness Context*

Glaser and Strauss (1965) suggested that, in society, there are observable and predictable patterns of interaction between dying persons and those interacting with them (e.g., family members and medical staff). As these individuals interact over time, it is suggested that four awareness contexts develop: closed awareness, suspected awareness, mutual pretense, and open awareness (Ogilvie & Taylor, 1994).

According to Glaser and Strauss (1965), closed awareness relates to the actions of relatives and medical staff, who find it difficult to discuss death with dying persons. In this level of awareness, medical staff and relatives do not inform the dying person they are dying. Somewhat higher on the awareness scale is suspected awareness whereby patients suspect that they are dying and may even try to trick the medical staff or family members into admitting it (Puner, 1974). The next step on the awareness scale is, mutual pretense, which occurs when both the patient and significant others know that the former is dying, but act as if it were not so. Finally, there is open awareness. Open

awareness occurs when all actors in the drama of death openly acknowledge that the patient is dying (Glaser & Strauss, 1965). Glaser and Strauss suggested that most dying people appreciate being told the truth, welcome an opportunity to discuss dying and death with an understanding and sympathetic person, and are grateful that this process allows them to prepare for death.

The concept of social death has often been paralleled to the retirement experiences of athletes (Rosenberg, 1982; Lerch, 1984). Lavalley (2001) suggested that social death may accompany athletic retirement with a loss of social functioning, isolation, and ostracism. In sport, the closed awareness category relates to the elite athlete being unaware of management's plan to release or deselect them. An often surprised or shocked athlete does not have the opportunity to discuss the inevitability of death (as an athlete) and little chance to make future plans (Gordon, 1995; Lavalley, 2001). A suspected awareness context exists, when the athlete suspects that the transition processes or retirement is imminent and the nonverbal communication they receive from coaching and administration staff confirms this, but those around the athlete do not explicitly discuss retirement with the athlete (Gordon, 1995). Mutual pretense exists when the athlete, coach, teammates, and administration staff, are all aware of the upcoming retirement of an athlete, but do not discuss the individual's career termination. It is possible in this case, that isolation and loneliness may occur (Glaser & Strauss, 1965). Finally, open awareness occurs when all people openly acknowledge that the athlete's career is ending. The athlete may have difficulty in accepting the knowledge of their impending career termination (Gordon, 1995), but open awareness may give the athlete an opportunity to plan their post-athletic career (Lavalley, 2001).

The awareness context theory has been criticised as being inadequate when applied to retirement from sport (Gordon, 1995; Taylor & Ogilvie, 1998). This theory has also been criticised on the basis that it was developed with non-sport populations (Greendorfer & Blinde, 1985), and based on the generalizability of the claim that it happens to the vast majority of athletes (Taylor & Ogilvie), as well as its limited perspective for not focussing on the life-span development of athletes (Lavalley & Wylleman, 2004). In addition, awareness context theory lacks operational detail to the specific components related to the career transition and termination adjustment process (Taylor & Ogilvie, 1998).

### *Stages of Dying*

Kübler-Ross's (1969) stage theory was formulated from an analysis of her interviews with over 200 dying patients. She argued that it is important for medical staff and families of dying patients to be observant and aware of these progressive stages, because the psychological needs of patients and the appropriate responses to them vary somewhat from stage to stage.

The first stage in Kübler-Ross's (1969), model is denial. Denial is an important self-protective mechanism, in that it enables people to keep from being overwhelmed or rendered helpless by the frightening and depressing events of life and to direct their attention to more rewarding experiences (Aiken, 2001). Denial of death is manifested in many ways. For example, patients, who have been told clearly and explicitly that they have a heart disorder, cancer, or some other serious illness, may deny having been told anything. Denial of death is, not limited to dying patients, and is also quite common among medical staff and among the family and friends of dying patients.

As the dying process continues, denial gradually fades into partial acceptance of death. Kubler-Ross (1969) proposed that partial acceptance is accompanied by feelings of anger at the unfairness of having to die without being given a chance to do all that one wants to do, especially when so many less worthy people will continue to live. The feelings of anger experienced by a dying person are frequently non-discriminating, being directed at family, friends, and medical staff. The direct target of the patient's anger, however, is the unfairness of death, rather than other people.

In the normal course of events, a dying patient's anger fades and is replaced by a desperate attempt to buy time to postpone death. Kubler-Ross (1969) called this the bargaining stage, in which the person bargains with medical staff, God, or any other entity that they believe might influence the process. A dying person may promise to take their medicine, pray for forgiveness, embrace new religious beliefs, or engage in rituals or magical acts to ward off death. The fourth stage in Kübler-Ross's (1969) model is depression, a stage in which the partial acceptance of the second stage gives way to a more complete realisation of impending death. Denial, anger, and bargaining have all failed, so the patient becomes dejected in the face of everything that he or she has suffered and all that will be lost in dying. Kübler-Ross considered depression like the preceding three stages, to be a normal and necessary step toward the final peace that comes with complete acceptance of death.

The last stage in the dying process, that of acceptance, is characterised by "quiet expectation" (Aiken, 2001). The patient now fully accepts death's inevitability and its blessings in terms of release from pain and anxiety. The patient may reminisce about life, eventually coming to terms with it, and acknowledge that the experience has been

meaningful and valuable. This is a time of disengagement from everyone except a few family members and friends, and the medical staff (Kübler-Ross, 1969).

Kübler-Ross's observations and investigations of the dying process are valuable contributions to thanatology, but her stage theory has not escaped criticism. It has been alleged that the orderly listing or sequencing of these stages and the precise order of the reactions of dying people are inflexible. Although some writers have suggested that the stages of dying theory are too rigid, this appears to be based on incomplete examination of the theory. For example, Kubler-Ross proposed that not all of the stages occur in every case, that they do not always follow the sequence presented here, and that an individual can return to a previous stage having appeared to have moved on.

A number of theorists (e.g., Lerch, 1984; Rosenberg, 1984) have drawn parallels between the stages of dying and athletes' adjustment to retirement from sport. The stages of dying, as described by Kubler-Ross (1969), when applied to retirement from sport, include: (a) denial against the initial trauma, in which the athlete refuses to acknowledge their career is over, (b) anger about the perceived injustice of sports career termination and their lack of control, (c) bargaining, in which the athlete negotiates for conditions to delay the inevitable, (d) depression over recognition that retirement is happening, and (e) full acceptance, in which the athlete accepts his or her career has ended.

Recovery from social death is possible, because it lacks the finality of real death, however, it is common for athletes to mourn the loss of their careers, either publicly or privately, drifting in and out of different stages in terms of their reactions. Ogilvie and Howe (1986) suggested that, the sequential stages of a dying person's progression toward acceptance of his or her death have been a useful means by which the

experiences of the retired athlete may be understood. Blinde and Greendorfer (1992) however, suggested that despite the inevitability of this role exit, athletes do not respond to this process in an identical manner. Also, not every sport retiree may experience the stages of dying, regardless of the mode by which athletes exit the sport role and the voluntary/involuntary nature of the decision to exit.

### Models of Human Adaptation

Crook and Robertson (1991) suggested that human adaptation theories incorporate a wider range of influence than gerontological and thanatological models and allow for both negative and positive adjustment. Unlike gerontological and thanatological models, many researchers of human adaptation theories (Hill & Lowe, 1974; McPherson, 1980; Schlossberg, 1981) have viewed retirement as a transition or process, focussing on life-span development.

In Schlossberg's (1981) model, a transition is any event and/or non-event, that brings about change. Schlossberg noted the importance of the evaluation of internal support systems, institutional support, and physical settings. Schlossberg suggested that successful transition depends on several interacting factors characterising the transition itself (e.g., timing, duration), the individual (personal characteristics, coping resources), and the transition environment (e.g., social support). These three interacting factors are seen as potential assets or liabilities. A person is, therefore, expected to have an easier transition when his/her assets outweigh liabilities.

Schlossberg (1981) suggested that the role change, affect, source, onset, duration, and degree of stressors are all important factors to consider in career transition. Second, individual attributes, such as psychosocial competence, sex, age, state of health,

race/ethnicity, socio-economic status, value orientation, and previous experience with a transition of a similar nature affect the retirement process, according to Schlossberg (1981). These attributes may vary considerably across the population of athletes and are all factors influencing the athlete in transition (Coakley, 1983). Third, Schlossberg noted the importance to the evaluation of internal support systems, institutional support, and the physical setting, however, few empirical studies have been conducted in this area of career termination.

Swain (1991) found Schlossberg's (1981) model useful in understanding retirement transitions of elite Canadian, ice-hockey, football, and racquetball players. Chow (2001), in a study of elite female athletes, used semi structured interviews, based on the Schlossberg model. Wheeler, Malone, VanVlack, Nelson, and Steadward (1996) applied Schlossberg's transition model to a study of adjustment to sport retirement among athletes with disabilities. All studies showed the emotional influence of retirement was to deal with such liabilities as loss of physical fitness, travel opportunities, friendships, social contacts, and self-identity, and suggested that the Schlossberg model is a useful framework for examining athlete transition and adjustment to retirement.

According to Crook and Robertson (1991), human adaptation models do incorporate a wider range of factors related to athletic career termination than social gerontological and thanatological theories, allowing for the possibility of both positive and negative adjustment. The model of human adaptation, as proposed by Schlossberg (1981), has been applied to the study of athlete retirement, although not frequently. According to Swain (1991), Schlossberg's transition model provides a flexible, multidimensional approach to the examination of athlete retirement. Further evidence in

support for this theoretical perspective is evident in Baillie and Danish's (1992) study of former elite, amateur and professional athletes. Sinclair and Orlick (1993), however, suggested that every athletic career retirement has the potential to be a crisis.

Since there has been little attempt to integrate individual theories, there is no single comprehensive theory of adaptation to retirement from sport. Furthermore, despite the extensive empirical and theoretical literature on retirement from sport, social gerontological, thanatological, and human adaptation theories have been unable to adequately capture the nature and dynamics of the career transition process into retirement, specifically the individual, situational, and personal characteristics of retirement from sport. As outlined by Taylor and Ogilvie (1998), understanding the number of interrelated variables may explain some of the individual variation in levels of overall quality of adjustment and life satisfaction in retirement.

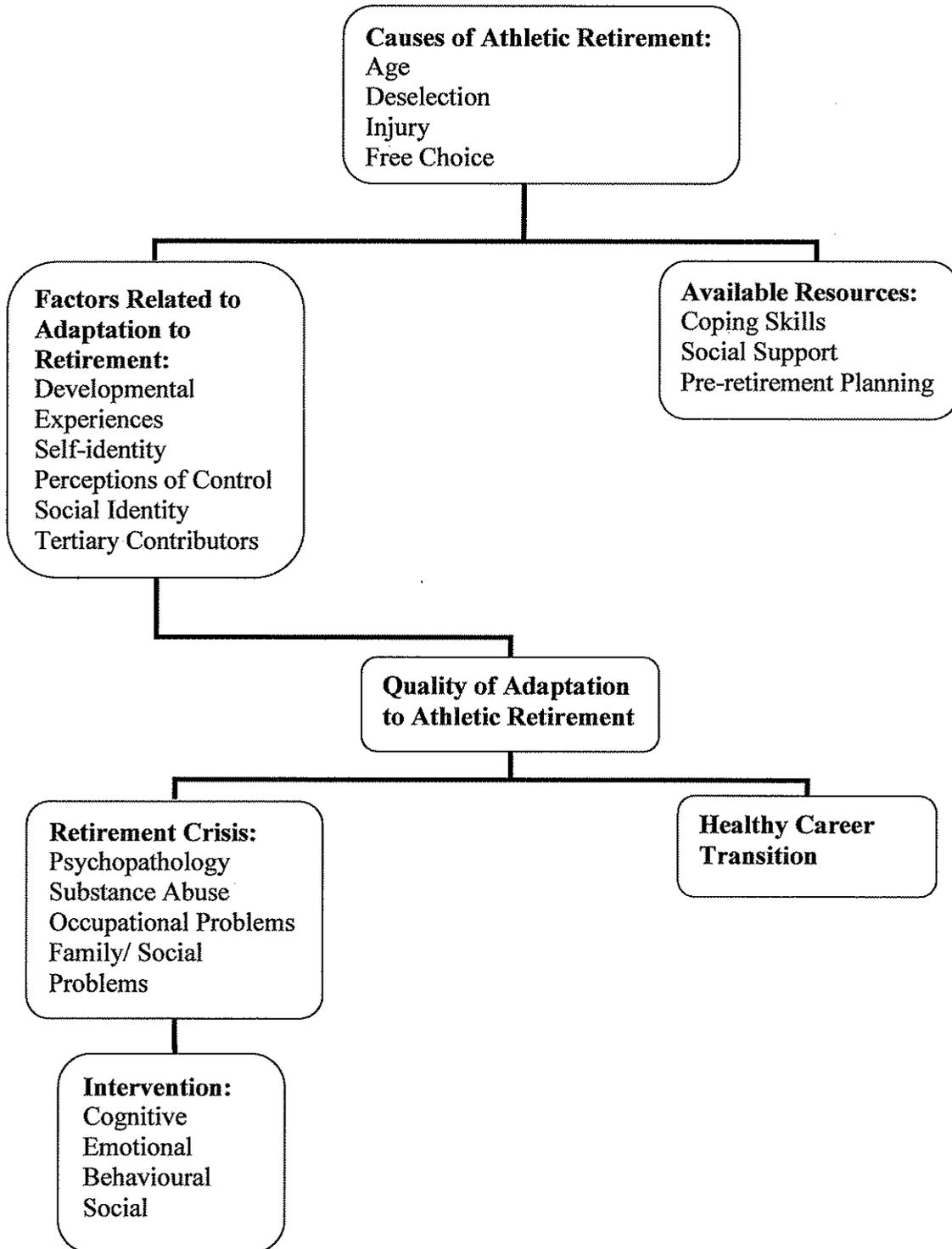
Taylor and Ogilvie's (1998) conceptual model of career transition in sport illustrates causal factors that initiate career transition (e.g., deselection, age, injury, free choice), interacting and developmental factors relating to retirement adaptation (e.g., transition, individual, and environmental characteristics), tertiary factors that mediate adaptation (e.g., social support and coping resources/skills) and potential sites for intervention (e.g., career transition and assistance programs).

Although the debate regarding the prevalence of difficulties during career transition still lingers, the career transition process seems to be an inevitable stimulus for adjustment (Gordon & Lavalley, 2001). Numerous studies have revealed that a significant number of athletes experience difficulties upon career termination (Haerle, 1975; Mihovilovic, 1968). Mihovilovic (1968), in a study of 44 male Yugoslavian soccer players, and Haerle (1975), in a study of 312 former baseball players, found that

retiring from sport is an inevitable source of emotional distress. Several contrasting studies have revealed little or no evidence of difficulties associated with the career transition process. Gorbett (1985) suggested that it is naïve to assume that former athletes are universally overwhelmed by retirement-induced stress. In addition, in a survey of 28 retired, professional tennis players, Allison and Meyer (1988) found that most participants did not find disengagement from sport traumatic, perceiving it to be an opportunity to re-establish more traditional social roles and lifestyles. Allison and Meyer noted that many of the participants in their sample reported that they had not planned to enter a professional tennis career, rather they had found themselves involved and seen little opportunity to opt out.

Taylor and Ogilvie's (1998) conceptual model of career transition (Figure 2.1) appears to illustrate the factors that specifically relate to adaptation to career transition. It also shows how, once transition difficulties are confirmed, appropriate therapeutic interventions can be introduced.

Figure 2.1. Conceptual Model of Career Transition



(Taylor & Ogilvie, 2001, p. 483)

## Research on Retirement from Sport

### *General Research on Retirement from Sport*

One of the most distressing experiences encountered by elite athletes is retirement from sport. Included in this section is a brief overview of major studies in the area of retirement from sport. Furthermore, I will outline research on the causal factors associated with retirement from sport.

Retirement from sport has only received academic interest in the last 30 years. Early studies involving retirement from sport often involved anecdotal depictions of elite athletes' lives following retirement and these studies frequently examined difficulties athletes had following retirement from sport (Hare, 1971; Hearle, 1975; Mihovilovic, 1968). Mihovilovic who studied of 44 male Yugoslavian soccer players found that retirement from sport can be a result of chronological age or career ending injury. Similar findings were reported by Hare, in his study of former professional boxers in America. In a survey of 312 former baseball players, in the United States of America, Hearle, investigated the level of pre-retirement planning for retirement and responses and attitudes following the event. He reported that only 25 percent of the players examined were making plans for the future and had accepted their career end.

The end of a sport career may be an easy transition for some athletes, however, for others, retirement can be a difficult and defining adjustment life event. Some researchers have studied the quality of adjustment to retirement by former elite athletes (Allison & Meyer, 1988; Avery & Jablin, 1988; Grove, Lavalley & Gordon, 1997; Lerch, 1981; Sinclair & Orlick, 1994; Webb, Nasco, Riley & Headrick, 1998; Werthner & Orlick, 1986). It has been suggested that the quality of adjustment to retirement is

likely to be a consequence of causes of retirement, developmental experiences available during an athlete's career, and sufficient coping resources. Although some athletes adjust quite well to retirement from sport, many athletes have reported adjustment to retirement as moderately stressful (Sinclair & Orlick, 1993) and as a "complex interaction of stressors" (Ogilvie & Taylor, 1993). Recent studies by Lavallee, Sinclair and Wylleman (1998), Taylor and Ogilvie (2001), and Werthner and Orlick, confirm that there is still considerable debate as to how well athletes adapt to retirement.

According to Taylor and Ogilvie (2001), retirement from sport involves a variety of unique experiences that sets it apart from typical retirement concerns, including the diverse ways in which athletes choose to, or are forced to, leave their sport. Researchers suggest that retirement from a sporting career is most frequently found to be a function of involuntary causes, such as career-ending injury, chronological age, and deselection, or voluntary causes, such as free choice (Blinde & Greendorfer, 1985; Sinclair & Orlick, 1993; Svoboda & Vanek, 1982; Taylor & Ogilvie, 2001; Werthner & Orlick, 1986)

Research has shown that career-ending injury is a significant cause of retirement from sport. Mihovilovic (1968) suggested that 32 per cent of Yugoslavian professional soccer players retired involuntarily, due to career-ending injury. In a study of 163 Czechoslovakian athletes from 20 Olympic sports, Svoboda and Vanek (1982) reported that 24 per cent of athletes retired due to injury, while in a study of 28 elite Canadian athletes, Werthner and Orlick (1986) found that 14 per cent retired due to injury. Due to the unexpected nature of injuries and the way they preclude opportunities for the athlete to prepare for retirement, injury-related retirees often experience the most difficult adjustment to retirement (Fortunato, Anderson, Morris & Seedsman, 1995; Webb et al., 1998; Werthner & Orlick, 1986).

A natural part of the maturation process is the slow deterioration of physical strength, endurance, flexibility and coordination (Fisher & Conlee, 1979). Deterioration of physical capabilities has a debilitating effect on performance and ultimately contributes to career termination. Taylor and Ogilvie (2001) suggested that age is one of the most significant reasons for retirement because psychological motivation and social status can also complicate an individual's ability to compete at the elite level. Mihovilovic (1969) reported that 27 per cent of athletes indicated that they were forced to retire because of their age. Furthermore, Allison and Meyer (1998) reported that 10 per cent of former female professional tennis players retired due to age.

According to Svoboda and Vanek (1982), the deselection process occurs at every level of competitive sports. Only a few studies, however, have looked at the impact that deselection has on retirement from sport. Mihovilovic (1968) found that 7 per cent of Yugoslavian professional soccer players were forced out by younger players. In a study of 48 former elite-amateur Australian athletes, Lavalley, Grove, and Gordon (1997) reported that an unanticipated "cut" or termination from a team was an important contributor to sports career termination.

In a study of the mediating factors and consequences of 117 Flemish Olympic athletes, Wylleman et al., (1993) demonstrated that many individuals choose to retire voluntarily due to a range of personal, physical, and psychological reasons. According to a number of studies (Greendorfer & Blinde, 1985; Lavalley et al., 1997; Svoboda & Vanek, 1982; Werthner & Orlick 1986) athletes may wish to assume a new life direction, seek new challenges or sources of direction, have a change in values, want to spend more time with family, or immerse themselves in a new social milieu. These are all reasons why athletes voluntarily retire from sport. In their study of former elite

Canadian athletes, Werthner and Orlick suggested that 42 per cent of athletes freely chose to retire.

Brewer, Van Raalte, and Linder (1993) suggested that athletic identity may have an influence on the quality of adjustment to retirement from sport. Athletic identity refers to the degree to which an individual identifies with the athlete role (Brewer et al. 1993). According to Alfermann and Gross (1998), athletes tend to adjust better to retirement from sport, if they have a multiple identity, that is, an identity that is not exclusively defined by their success in their sport, but also by social relationships, experiences, and successes outside the sport domain. According to Werthner and Orlick (1986), athletes with a self identity almost exclusive of their sports involvement experience career termination as something very important that is lost and can never be recovered. Grove, Lavallee, and Gordon (1997) suggested that athletes who overly identified themselves with their sporting careers were most vulnerable to distress following retirement from sport. Murphy, Petitas, and Brewer (1996), Pearson and Petitas (1990) and Kerr and Dacyshyn (2000) have found that strong athletic identities are related to problems associated with involuntary retirement. Furthermore, Ogilvie and Taylor (1993) suggested that athletes may, therefore, question their self worth and future opportunities.

Retirement from sport is a difficult experience for many athletes that may trigger varying degrees of emotional and physical stress. According to Taylor and Ogilvie (2001), the presence of effective coping skills can reduce the distress that may occur following retirement from sport. Sinclair and Orlick (1993) suggested that coping strategies, such as keeping busy, maintaining a routine of training and exercise, social support, and staying in contact with sporting contacts, assists in the quality of adjustment

to retirement. Grove et al. (1997) also reported that planning, active coping, and seeking social support are commonly used coping strategies. Pearson and Petitas (1990) suggested that those athletes, with well developed coping resources, experience less stress than those athletes who possess fewer coping skills. In a study of 90 former elite athletes, Alfermann and Gross (1997) also found that social support from friends, family, team-mates, and coaches are important coping resources among retired athletes, particularly those athletes who retired involuntarily.

Over the last 15 years, a strong body of research has been built in Australia, whereby the retirement experiences of athletes from sport have been examined. In an exploratory study, Hawkins and Blann (1993) suggested that male and female athletes would prefer development and retirement preparation programs in individual or small group counselling sessions during and after their sporting careers. In a case study of 5 elite athletes, Hewitt (1994) suggested that the coach, age of the athlete, academic achievement, and outside interests influenced future vocational choices of retired athletes. Fish (1994) studied the short-term and long-term impact of deselection on retirement in 15 former field hockey, cricket, and water polo players. Fish found there was a lack of understanding about the impact of retirement, among sporting organisations, officials, team-mates, and family members. Fortunato et al. (1995) investigated Australian Football League (AFL) players whose careers ended involuntarily, through injury or deselection. Fortunato et al. also reported that retirement had a big impact for most of the footballers interviewed, especially those whose retirement was voluntary. Lavalley, Gordon, and Grove (1997) examined the causes of retirement and degree of adjustment required among former elite-amateur Australian athletes. Results revealed that involuntary retirement was related to significantly greater

emotional and social adjustment than was voluntary retirement. Furthermore, in a later study by Lavalley, Grove, and Gordon (1997), an investigation into the coping strategies of 15 former elite athletes revealed that confiding in others helped to modify stress and to assist in adjustment to retirement from sport. In a related study, Grove, Lavalley, and Gordon, (1997) collected data related to financial, occupational, emotional, and social adjustment to retirement from sport. Results suggested that acceptance, positive reinterpretation, planning and active coping strategies were used most frequently. Also, Speed, Morris, and Seedsman (2000) in reporting the welfare of retired horse racing jockeys, suggested retirement from riding had, at times, been stressful, particularly in the areas of financial, employment, education, recognition by the racing industry, social opportunities, and physical and mental health.

Retirement from elite sport is now a well-delineated topic of study among the sport psychology community, particularly within Australia. Research has shown that many athletes are poorly prepared for retirement from sport, and some face difficulties, according to causal factors, like athletic identity and coping strategies following retirement.

### *Voluntary and Involuntary Retirement*

The reasons for career termination are manifold and may necessitate psychological, physical, or emotional adjustment (Koukouris, 1991; Taylor & Ogilvie, 2001). What constitutes adjustment is likely to differ between individuals. Many researchers (Ogilvie, 1982; Sinclair & Orlick, 1993; Wylleman, De Knop, Anseeuw, De Clercq, Bouckaert & Bassez, 2001) have proposed that the retirement experience is likely to vary for athletes who retire voluntarily compared to those who retire

involuntarily. Research has demonstrated that the most common casual factors for sport retirement are chronological age, deselection, career-ending injury, and free-choice (Taylor & Ogilvie, 2001). In this section I examine the research on adjustment experiences of voluntarily and involuntarily retired athletes.

Athletes are often forced into retirement. In a study of adjustment problems, Mihovilovic (1968) reported that, for 95.4% of the soccer players, retirement was involuntary. Researchers have suggested that involuntary retirees experience more adjustment difficulties throughout retirement than voluntary retirees (Allison & Meyer, 1988; Kleiber & Brock, 1992). When an athlete is forced to withdraw, due to circumstances out of their control, their retirement is considered involuntary (Alfermann, 1995). According to Taylor and Ogilvie (1998) the three main involuntary causes of career termination are age, deselection, and injury or illness. Webb et al. (1998) suggested that athletes, who are forced into retirement by these involuntary causes, have been thrust into circumstances in which some measure of pre-emptive control has been removed. Involuntary causes of retirement, therefore, may affect an athlete's ability to effectively deal physically, psychologically, and socially with certain events following retirement from sport.

Athletes may freely elect to disengage from sport for a combination of personal, social, or psychological reasons. Reasons surrounding voluntary retirement may include a wish to assume a new direction in life (Lavalley, Grove & Gordon, 1997; Werthner & Orlick, 1986; Wylleman, 1995), engagement in a new social milieu, including family and friends (Svoboda & Vanek, 1982; Allison & Meyer, 1993), lack of enjoyment or fulfilment from sport (Werthner & Orlick, 1986), seeking out new challenges or having a change in values (Greendorfer & Blinde, 1986; Lavalley, 2000). Other reasons include,

family problems (Mihovilovic, 1968), problems with coaches or the sporting organisation, and financial difficulties (Jowett & Meek, 2000; Werthner & Orlick, 1986). Voluntary retirement or free-choice of career termination is an often-neglected form of retirement (Blinde & Greendorfer, 1985). It should not be assumed that ending a career voluntarily eases the career transition process (Taylor & Ogilvie, 1998). Several theorists have suggested that athletes who retire due to voluntary circumstances experience more adjustment difficulties (e.g., Crook & Robertson, 1991; Ogilvie & Taylor, 1993). According to Alfermann (1995), reasons surrounding voluntary retirement play a crucial role in the adjustment to post-career life. In a study of elite female gymnasts, Kerr and Dacyshyn (2000) found that several athletes who chose to retire still described their termination as difficult. The voluntary decision to retire may be due to a need to get out of an uncomfortable situation, such as high stress of competition or conflict with a coach (Taylor & Ogilvie, 2001).

### *Physical Issues*

Retirement from sport due to physical reasons, such as physical maturation (Allison & Meyer, 1988; Svoboda & Vanek, 1982), and injury (Allison & Meyer, 1988; Mihovilovic, 1986; Werthner & Orlick, 1986) are prevalent issues in the sport retirement literature. Evidence from research suggests that a decline in performance, due to advancing age, is typically considered to be a primary cause of retirement (Allison & Meyer, 1988; Mihovilovic, 1968; Svoboda & Vanek, 1982). Part of the maturation process is the slow deterioration of the physical capabilities that are required to perform physically at an elite level (Fisher & Conlee, 1979). With regard to physical ramifications of career-ending injury, permanent physical damage to bones, cartilage,

ligaments, or nerves, and arthritis may hamper an athlete's ability to lead a productive and fulfilling life, resulting in limited future career options following athletic retirement (Ogilvie & Howe, 1982). In a study involving 91 high school, college, and professional sports participants, Webb et al. (1998) suggested that injury, rather than deselection and age, is likely to catch athletes off-guard. Webb et al. found that injury-related retirees had the most difficult adjustment, due to the unexpected nature of injuries, the way they preclude opportunities for the athlete to prepare for retirement, and the observation that injuries are seldom recognised immediately as career-ending. Forced retirement due to injury, therefore, can create a problematic context for retirement adjustment after a sporting career. In fact, research has indicated that between 14% and 32% of athletes retire because of serious injury (Allison & Meyer, 1988; Mihovilovic, 1986; Werthner & Orlick, 1986).

Researchers have argued that athletes who retire due to injury are at higher risk of experiencing psychological difficulties following retirement than those who retire voluntarily (Avery & Jablin, 1998; Ballie, 2002). In a qualitative study of 48 professional Australian Rules football players, including 15 who were injured, Fortunato (1998) centred on identifying key issues experienced by athletes following retirement. Fortunato found that injured players, forced into retirement, related stories about how they were unprepared for retirement and how their futures appeared uncertain. Similarly, Smith, Scott, O'Fallon, and Young (1990) found that seriously injured, retired athletes experienced significantly more tension, depression, and anger, and showed less vigor than those who retired voluntarily. A major change in attitude may be required to ensure a healthy adaptation to injury and life. Without this change in attitude, athletes may not be able to accept injuries and respond positively (Williams et al., 1998).

Athletes' reactions and adjustments to career-ending injuries may also involve a variety of psychological sequelae. In the case of athletic injury, stress associated with athletes' physical activity may carry over to affect general self-esteem, emotions, relationships with others, and non-sport roles (Gould, Bridges, Udry, & Beck, 1997). Further, Wiese-Bjornstal, Smith, and Lamott (1995) suggested that once injury occurs in sport, psychological consequences of that injury encompass cognitive, emotional, and behavioural responses.

Athletic careers that end voluntarily do not necessarily preclude athletes from having difficulties in adjusting to retirement. Taylor and Ogilvie (2001) suggested that former athletes, who performed at an elite level in their chosen sport, may feel pressure to maintain peak physical condition and/or experience frustration due to physical deterioration that often accompanies retirement from sport. Also, although an athlete may freely choose to retire, they often experience chronic pain and sometimes permanent disability to varying degrees, as a result of involvement in sport (Allison & Meyer, 1988; Mihovilovic, 1986; Werthner & Orlick, 1986; Taylor & Ogilvie, 2001). As a consequence, an injury need not be serious to have dramatic impact on athletes' performance and, in turn, their career (Taylor & Ogilvie).

Regardless of the type of retirement, injuries sustained during their athletic careers may affect adjustment to retirement of athletes, in such ways as serious distress, manifested in depression, and suicidal ideation and attempts (Ogilvie & Howe, 1982), and perhaps limit their choice of new careers (Taylor & Ogilvie, 2001). Furthermore, it is believed that career ending injuries can cause athletes to experience an identity crisis (Elkin, 1981), fear, anxiety, loss of status, and lack of self-confidence (Rotella & Heyman, 1993).

*Mental Issues*

According to McLaughlin (1981), adjustment to retirement is a difficult experience for all retirees and triggers varying degrees of emotional stress. Ogilvie and Howe (1982) suggested that each individual faces a period of mental adjustment, including denial, anger, resentment, and/or depression, during the transition from athlete to ex-athlete. Smith et al. (1990) found that athletes with strong athletic identities are often more vulnerable to feelings of anxiety, depression, or hopelessness than those who identify less with the role of the athlete. McPherson (1980) suggested that some athletes will have an identity that is composed almost exclusively of their sports involvement. Furthermore, in a study of retirement experiences of 28 former Canadian Olympic athletes, Werthner and Orlick (1986) reported that many elite performers defined themselves as an athlete, excluding almost everything else from their lives. Although Werthner and Orlick's research involved open ended, in-depth interviews with former elite amateur athletes, there was no clear distinction between the retirement experiences of athletes from different sports. Werthner and Orlick, did, however, find that involuntary retirement was associated with greater adjustment problems.

Several cognitive influences have also been linked with involuntary retirement, specifically injury. Self-identity is a variable that has been comprehensively researched in relation to stress and sport injury. In a series of four studies, Brewer et al. (1993) reported that athletic identity was positively associated with depressive reactions to sport injury, particularly for those athletes with a strong and exclusive athletic identity. Similarly, Pearson and Petitipas (1990) contended that retirement forced by athletic injury would be particularly disruptive to an individual's identity. As mentioned

previously, involvement in and commitment to elite sport seldom leaves sufficient time or opportunity for exploring options outside that sport (Ogilvie & Taylor, 1993). Blinde and Greendorfer (1985) suggested that an athlete's inability to assume other roles outside of the athletic setting, following injury and, consequently, forced retirement, may severely inhibit the athlete upon retirement. Webb et al. (1998) suggested that another form of involuntary retirement, deselection, may force athletes to confront the inherent limitations of their athletic ability, causing a diminution of self-esteem, self-confidence, and questioning athletic identity. Furthermore, Webb et al. suggested that voluntary retirement (i.e., free choice to retire) allows for new identities to be developed prior to retirement, resulting in fewer difficulties in adjusting to retirement when the athlete does quit the sport.

#### *Social Issues*

Blinde and Greendorfer (1985) and McPherson (1980) suggested that the absence of alternative social support (e.g., family and friends) may cause an athlete to become isolated, lonely, and unsustained socially upon retirement, leading to significant distress. Rotella and Heyman (1993) proposed that friendships are often based exclusively on the role of the athlete and, suddenly, these important social ties may be ruptured when athletes retire.

The social status of an involuntarily retired athlete (e.g., ageing, deselected, or injured) may contribute to retirement difficulties (Lavalley et al., 1997). Aged athletes may no longer be seen or see themselves as athletes. Athletes whose socialisation process occurred primarily in the sport environment may be characterised as "role restricted" (Wylleman & Lavalley, 2004). Furthermore, Rotella and Heyman (1993)

observed that no one quite knows how to relate to these athletes, except perhaps in terms of their past glory. Gould, Bridges, Udry, and Beck (1997) examined the effects of coping skills and social support, following the occurrence of injury for 21 U.S. alpine and freestyle skiers. Gould et al. found that athletes experienced a perceived lack of attention and feelings of isolation and, in most cases, the sense of isolation pertained to feeling cut-off from their coach, teammates, and close friends. Further, Thoits (1995) suggested that the onset of a relatively severe stress (e.g., career-ending injury) may create increased social dependency, resulting in the mobilization of social resources.

Research has shown that voluntarily retired athletes also experience problems with social issues. In a study of Czechoslovakian national team athletes, Svoboda and Vanek (1982) found that, when athletes voluntarily terminated their careers, values of aging athletes shifted from a self-focus toward a focus on family and friends. According to Taylor and Ogilvie (1994), when an athlete retires voluntarily, they are no longer an integral part of the team or organisation and poor social support from past team members, family, and friends may adversely affect the athletes' adaptation to retirement. Furthermore, Ogilvie and Howe (1986) suggested that athletes and their families must deal with new economic realities and the added stress of educational or vocational training and finding a job to earn a living, following voluntary retirement. Evidence cited by Webb et al. (1998), however, suggests that elite athletes, who are preparing to retire, often organise jobs before retiring.

In the case of the elite athlete, even though the timing and form of retirement may be uncertain, the transitional event to retirement from sport will definitely occur (Stambulova, 2000). If we want to know the whole athlete, then the different adjustment contexts, namely physical, mental, and social, need to be taken into account. This

section has provided a summary of the factors associated with the quality of one's adjustment to life after elite sport following voluntary or involuntary retirement.

According to Lavallee et al. (1997), there is little research available on the topic of the impact voluntary and involuntary reasons for retirement have on the ongoing adjustment process. Unfortunately, it would seem that elite athletes are frequently unprepared for retirement, irrespective of whether or not their retirement comes about voluntarily or involuntarily (Fortunato & Morris, 1998).

### Duration of Retirement

A range of theories and models of retirement have been applied to athlete retirement research. Many of the theories, however, were developed over 30 years ago and may no longer be as suitable or relevant when referring to career termination. Nowadays, due to changes in societal work pressures and the comfort and freedom of retirement, people are retiring earlier. Furthermore, with improvements in science and living conditions, people are living longer and the retirement process is longer than ever before, and, duration of retirement is, therefore, increasing. The concept of longer duration of retirement from work can be applied to sport also. Many athletes from various sports retire long before the typical retirement age and experience a lengthy duration of retirement, regardless of the type of retirement (voluntary or involuntary). In this section, I will consider the appropriateness of applying a range of gerontological models of aging, thanatological models of death and dying, and models of human adaptation to transition to duration of retirement from sport.

Although a number of gerontological theories can be applied to retirement from sport, they are rarely used in the study of retirement from sport over time. Some of these

theories, however, may be particularly effective, flexible and suitable enough to be related to duration of retirement from sport. Disengagement theory when applied to sport has shown that many athletes do disengage from the world of sport, however, there has been no study that indicates the effectiveness of this approach on former athletes over the duration of retirement. According to Ogilvie (1982), one limitation of the use of disengagement theory in sport, is that disengagement in the withdrawal process may lead to difficulty in adapting to old age. In relation to duration of retirement from sport, this is particularly concerning. Athletes usually retire from sport at quite a young age (in comparison to retirement from the workforce) and, if the former athlete does not engage in the withdrawal process for a lengthy period of time, it is likely that they will experience problems adapting to retirement. Social breakdown theory has not yet been successfully applied to the study of duration of retirement from sport. According to Gordon and Lavalley (2001), social breakdown theory addresses the potential for minimisation of social breakdowns and smoothing out of the transition period. There is concern, however, that this process may only be suitable for a short time following retirement. Long-term transition, therefore, may be more difficult for those who experience more social breakdown during the transition to retirement from sport. Activity theorists (Burgess, 1960; Havighurst, 1963) suggest that involvement in and maintenance of a major role is likely to support athletes throughout the duration of retirement, assisting in the development of a positive self-concept and high satisfaction (Burgess). Whether former athletes remain involved or not, many athletes take on new major roles in their family and work contexts, while maintaining a similar level of work activity to what they experienced in their sporting days. For example, a number of top sport performers have become successful in business, and a range of other moderate to

high profile pursuits (e.g., public speaking, community service roles). It is not known, however, whether activity helps former athletes to cope with retirement over the long-term. Continuity theory may also be suitably applied to the study of duration of retirement from sport, with a focus on longevity of retirement experiences of athletes. Continuity theory proposes that the retirement transition is facilitated when an athlete attempts to retain a continuity in their activity or role by taking on other sport-related roles (e.g., coach, administrator, sports writer). The former athlete, therefore, remains connected to sport, maintaining relatively stable income and a level of subjective and behavioural commitment to sport following retirement (Lerch, 1981).

It is also not yet known whether two thanatology theories, awareness context theory (Glaser & Strauss, 1965) and Kubler-Ross' (1969) stages of dying, can be suitably applied to retirement from sport. Glaser and Strauss' awareness context theory, and the concept of social death that may accompany athletic retirement, may not be appropriate in the study of retirement from sport over time. According to Taylor and Ogilvie (1994) and Lavallee and Wylleman (2004) the awareness context theory is limited when applied to sport due it's inability to adapt to life span development following retirement, career transition, the career termination adjustment process, and, ultimately, duration of retirement from sport. Although former athletes may experience stages of Kubler-Ross' dying theory, such as anger and depression, the theory is not likely to be suitable in the study of retirement from sport over time. In order for this theory to be effective, former athletes must reach the final stage, acceptance, before they move through the remaining years of retirement, which may continue for 30, 40 or even 50 years depending on when retirement from sport occurred.

Schlossberg (1981), using a model of human adaptation, and, Taylor and Ogilvie's (1998), using a conceptual model of career transition suggested that many athletes have not adapted well to retirement from sport. Schlossberg's (1981) model of human adaptation, has been applied to numerous studies of retirement from sport (Chow, 2001; Swain, 1991; Wheeler, Malone, VanVlack, Nelson, & Steadward, 1996), dealing with the impact of retirement on former athletes. Although this model has been successful in examining athlete transition and adjustment to retirement and provides a flexible, multidimensional approach (Swain, 1991), it has not been applied to studies of impact over different durations of retirement from sport, including long-term effects. Similarly, Taylor and Ogilvie's (1998) conceptual model of career transition proposes interventions to deal with causal factors that initiate career transition, however, this model has not been examined in relation to interventions with former athletes over time.

Very few studies (e.g., Kleiber & Brock, 1992; Lerch, 1984) have examined the impact of duration of retirement of former athletes (i.e. more than 3 years). The majority of retirement studies of former athletes, however, have looked at retirement over a moderate duration (e.g., Grove, Lavalley & Gordon, 1997; Parker, 1994; Sinclair & Orlick, 1993), (i.e. between 18 months and 3 years) and quite a lot of research has focussed on short-term retirement of former athletes (e.g., Ahlgren, 1995; Fortunato & Marchant, 1996; McNally, Cavib-Stice, & Knoth, 1992; Munroe & Albinson, 1996; Rosenberg, 1981; Werthner & Orlick, 1986), (i.e. less than 18 months).

There are numerous problems associated with drawing conclusions about the impact of duration of retirement on former athletes, due to the different contexts with which athletes live, compete and retire in. Studies that have examined the affect of duration of retirement have involved numerous sports, have been conducted at different

times in history and involved former athletes from different countries and cultures. Given the lack of long term research on the impact of duration of retirement on former athletes, there is a need to examine the cause of transition effects longitudinally. Cross-sectional studies are weakened by differences such as those previously mentioned. For example, many sports today are recognised businesses and athletes are provided with excellent remuneration that helps support them in their retirement years. Sport nowadays also provides great opportunities for continuity in such roles as coaching, administration or commentary positions for former athletes. This is especially true when compared to sport 10 years ago. In order to address cohort problems such as those previously mentioned and to assist researchers in keeping up to date with current trends in retirement from sport, longitudinal studies are likely to be the most effective research method. This method does not completely address all issues related to the factors that affect the long-term impact of retirement, and suffers from the cohort problem. An examination of the current level of physical, mental and social adjustment of athletes who have been retired for different durations (short-term, moderate-term, long-term) can provide a basis for more extensive research on this issue that could be important for former athletes of all ages.

#### Jockey Specific Retirement

As Ogilvie and Taylor (1993) suggested, there has been a steady stream of anecdotal, theoretical, and empirical exploration of career termination among athletes. Numerous studies have examined the potential difficulties associated with athletic career termination (Baillie & Danish, 1992; Crook & Robertson, 1991; Taylor & Ogilvie, 1994), however, there is a paucity of information relating to professional horse racing

and the retirement of jockeys (Lippincott-Williams & Wilkins, 2001; Speed, Seedsman, & Morris, 2001; Turner, McCrory, & Halley, 2002).

Personal distress experienced by jockeys may be associated with a loss of income, loss of identity and lowered self esteem, as well as being disconnected from their sporting relationships and society in general following retirement (Speed et al., 2001). The severity of personal distress, however, may differ depending on the type of retirement the jockey experiences (i.e., voluntary or involuntary). Retirement for jockeys, as in all professional sports, may be a consequence of aging, injury, deselection, or free choice. Speed et al. (2001) reported that the majority of retired jockeys indicated that their retirement was involuntary, the main reason being injury.

The career of a professional jockey is laden with physical demands and danger, as well as psychological threat (Speed et al., 2001). Every day, jockeys are faced with the risk of career-ending injury. According to Lippincott-Williams & Wilkins (2001), jockeys are regularly catapulted off their mounts, impacting the ground at high speeds. Horses are known to kick, trample, head-butt, or even crush their riders (Lippincott-Williams & Wilkins, 2001). Recent evidence from the study by Speed et al., indicates that as many as 70% of jockeys retire involuntarily from riding because of injury.

According to Lippincott-Williams and Wilkins (2001), jockeys often suffer both repeated major and minor trauma. Turner, McCrory, and Halley (2002) suggested that jockeys take soft tissue injuries as a part of everyday life and although jockeys tend to return to riding relatively quickly, this depends on the availability of rides, rather than the injury necessarily being resolved. In support of this, Fletcher, Davies, Lewis, and Campbell (1995) suggested that jockeys accept bony fractures and soft tissue injuries as occupational hazards. Although they are rarely noticed, ongoing trauma and just plain

wear and tear to the body may have devastating consequences. McLatchie and Jennett (1994) reported that repeated injuries, even if mild, can cause cumulative damage and lead to retirement from riding. Further, Lippincott-Williams and Wilkins (2001) suggested that high levels of injury and repeated trauma may translate into functional problems and disability later in life. This was evident in the Speed et al. (2001) study, where it was reported that more than 40% of retired jockeys reported experiencing back problems, arthritis, and other joint problems since retiring.

A significant number of jockeys are also forced into premature retirement each year because of a single career-ending injury (Speed et al., 2001). Patel, Turner, Birch, and McCrory (2001) reported that, in England, in the 8-year period from 1992 to 1999 inclusive, the average number of rides undertaken by a jockey was 380 per year, that a jockey falls every 268 rides, is injured every 673 rides and suffers serious career-ending injury every 3,994 rides. Statistics released by the Jockeys Guild in North America estimated that more than 100 jockeys died as a result of racing accidents from 1950 to 1987 (DeBenedette, 1987). A further 37 jockeys retired due to catastrophic injury, specifically spinal cord injuries leading to permanent disability (DeBenedette, 1987).

Deselection for jockeys usually occurs in the form of performance slumps, suspension, disqualification, lack of success, and loss of marketability, leading to rides drying up and a lack of opportunity, all of which may influence the longevity of a jockey's career. According to Speed et al. (2001), lack of opportunity is a common reason for retirement from riding and directly affects the earning potential of jockeys. Speed et al. estimated that at the time of their survey, the average number of rides for a moderately successful jockey was 294 per year, with consolidated average earnings, including winning and losing rides, of (AUS) \$45,380. Furthermore, Speed et al. found

that, following retirement, more than 50% of jockeys reported an annual income of less than \$30,000 and only 8% earned more than \$50,000. It is not surprising, therefore, that over 60% of jockeys experienced financial difficulties during their retirement and continued to have serious concerns about their future financial circumstances.

With their total involvement in racing from an early age, many jockeys do not have the opportunity to establish links or resources to help them cope with some of the personal circumstances that they must face following retirement. Personal characteristics of retirement for jockeys that are intrinsic to the individual jockey include the jockey's self-beliefs (perceptions of control, self-worth, self-identity, and social-identity), beliefs about significant others (e.g., spouse's response to their retirement, the racing community's attitudes toward them), and the jockeys' adaptive (e.g., social engagement, adoption of other interests, such as hobbies or recreational activities) and/or non-adaptive (e.g., substance abuse, isolation) behaviours during retirement. Speed et al., (2001) suggested that personal experiences of jockeys following retirement, such as an inability to form an identity outside racing can bring about feelings of emotional distress (inability to cope), and loss of confidence.

According to Speed et al. (2001), retirement from riding can be seen as an opportunity for personal growth and development, a time to engage in family commitments, or a chance to extend social networks. It may also be a stressful event characterised by limited employment opportunities, financial hardship, poor physical health, and/or emotional distress.

Education and employment opportunities beyond their immediate environment are two areas in which many jockeys have also experienced problems following retirement (Speed et al., 2001). With limited prior work experience outside riding and

minimal levels of formal education, leaving professional riding to pursue employment in areas outside the racing industry may not be a realistic option for some jockeys. Speed et al. suggested that, although most retired jockeys had been engaged in continuous employment since they retired from riding, many jockeys (42%) felt that their employment options were restricted, because of a lack of job opportunities or a lack of prior employment history outside of racing (47%). Lack of job opportunities may also create financial difficulties for some retired jockeys. Further, Speed et al. reported that approximately 60% of retired jockeys indicated that they had experienced financial difficulties since retiring from riding and over 50% were concerned about their financial future. This financial concern, lack of formal education, and minimal job skills may act to undermine a jockey's self-esteem and self-confidence, limiting social support and creating additional issues for jockeys to deal with in retirement.

Speed et al. (2001) also found that maintaining a social life within the racing industry and establishing new contacts outside the racing industry were difficult tasks for many jockeys following retirement. Limited opportunities to develop social networks outside racing and the lack of ability to move successfully into new social groups and develop non-racing contacts have been barriers for most jockeys (Speed et al., 2001). These findings support the arguments of Koukouris (1994), Blinde and Greendorfer (1985), and Coakley (1983), who have suggested that athletes with limited employment skills, material resources, or social contacts tend to experience adjustment difficulties. A deficient social network and a lack of social support, therefore, may make retirement more difficult for jockeys. Speed et al. (2001) also suggested that, although some top jockeys have access to professional services and support networks, and retire from riding

to a secure home and employment base, there are many who do not have financial security or professional advice, sometimes with tragic consequences.

### The Present Thesis

The life of an elite athlete involves full time physical, mental and social commitment to training and competition, in a disciplined and structured environment. Due to these requirements of elite sport, retirement from sport is unique and provides an experience, that can be traumatic. Retirement from horse racing in particular, is often problematic for jockeys (Lippincott-Williams & Williams, 2001; Speed, Seedsman, & Morris, 2001; Turner, et al., 2002).

Retirement from elite sport generally is associated with adjustment problems (Grove, Lavalley, & Gordon, 1997; Lavalley & Wylleman, 2000). These problems may cause distress that may manifest itself physically, mentally, or socially (Taylor & Ogilvie, 2001). A range of theories and models of retirement have been applied in athlete retirement research in order to understand the retirement process, including social gerontological models of aging, thanatological models of death and dying, and models of human adaptation to transition.

Based on what has been presented in the literature review, the present thesis is going to examine issues to do with the nature of retirement. The present thesis will examine retirement experiences of jockeys, especially adjustment to retirement from riding, to examine the effect of voluntary and involuntary retirement on adjustment to retirement, and, to examine the effect of length of retirement and on adjustment experienced during retirement.

## Aims

### *General Aim*

To examine the adjustment to retirement of horse racing jockeys.

### *Specific Aims*

1. To examine the experiences of physical, mental, and social adjustment of retired jockeys.
2. To compare the experiences of physical, mental, and social adjustment of former jockeys who retired voluntarily with those of former jockeys whose retirement was involuntary.
3. To compare the experiences of physical, mental, and social adjustment in former jockeys who have been retired for less than 10 years, between 10 and 20 years, and for more than 20 years.

## CHAPTER 3: METHOD

The research comprising this thesis was part of a larger study conducted by Speed et al., (2001). The study by Speed et al., investigated the jockeys life in racing, the retirement issues of jockeys, strategies used in retirement, available support services. Using this research, the present thesis examined various aspects of the Speed et al. (2001) research, specifically the physical, mental and social adjustment to retirement from riding. Other aspects examined were the effects of voluntary and involuntary retirement on adjustment to retirement, and the effect length of retirement has on adjustment to retirement.

### Participants

The participants were 72 retired jockeys aged between 27 and 79 years, with a mean age of 52.1 years ( $SD = 12.44$ ). These participants represented 26% of 276 retired jockeys, who were sent an invitation to participate in this study to their mailing address, according to the records of the Victorian Jockeys Association (VJA), Racing Victoria, part issues of Inside Racing, the internet-based White Pages (Telstra) and personal contacts of the research team. The sample comprised 97% male and 3% female retired jockeys. The average career duration of the retired jockeys was 19.8 years ( $SD = 9.3$ ) and ranged between 4 and 45 years. The average length of years retired was 16.04 years ( $SD = 11.32$ ) and length of retirement ranged from 1 to 41 years.

### Design

The research team (Speed et al., 2001) sent a questionnaire, covering a range of physical, mental, and social aspects of the life of ex-jockeys since retirement, to retired

jockeys within Victoria. Based on responses to the questionnaire, I examined the overall patterns of physical, mental, and social experiences of retired jockeys in this thesis. Further, in this thesis, I compared those jockeys who were classified as voluntary and involuntary retirees and explored the relationship between length of retirement and experiences of involuntarily retired jockeys.

## Measures

### *Background Information Questionnaire*

A background information questionnaire was included in the package sent to the former jockeys. The background information questionnaire included questions about the personal details of jockeys (e.g., age, marital status), specific involvement in riding (i.e., duration and reasons for riding, details of injuries), and their current retirement status (i.e., years since retired from riding, reasons for retirement), all in open-ended items.

### *Retired Jockeys Questionnaire*

The Retired Jockeys Questionnaire (Speed et al., 2001) was developed for the purposes of the larger study. The questionnaire for retired jockeys consisted of 34 items. Questionnaire items were based on the key aspects of retirement from sport, in general, and racing in particular. These items were generated from previous theory and research on retirement transitions, as well as a qualitative component of the original study of retirement of jockeys (Speed et al., 2001). Specifically, the items addressed material well-being, health, productivity, financial and employment circumstances, place in the community, and emotional well-being. Only sections on physical, mental, and social issues, however, are addressed in this thesis. The items employed here did not go

through any further validation. Participants indicated their current status, as well as problems of, and satisfaction with, these key aspects of retirement. Participants were instructed to respond to the series of statements in relation to their experiences in retirement. An example of measuring current status is “I am satisfied with my current financial situation”. Responses were measured on a 5-point Likert type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). An example of a question in relation to the problem areas is, “Has weight gain been a problem in your retirement?” Problem areas of life were rated from 1 (*very much a problem*) to 5 (*not a problem at all*). An example of a question in relation to satisfaction is, “How satisfied are you with your life today?” Satisfaction was measured on a 5-point Likert type scale ranging from 1 (*very dissatisfied*) to 5 (*very satisfied*). Total scores were calculated by summing the responses to the items in each sub-scale, with low scores indicating a positive assessment of quality of life following retirement and high scores indicating a less positive assessment of quality of life following retirement.

#### Procedure

Access to jockeys was sought and approved by the VJA and Racing Victoria. The Retired Jockeys Questionnaire (Speed et al., 2001) return was taken as consent to participate in the study. The research team sent a questionnaire package together with a plain language statement that outlined the objectives of the larger study by mail to all former (retired) jockeys residing in Victoria. The questionnaires did not request identifying information. The questionnaires were coded by the researchers to allow for the sending of a follow up reminder to those not responding to the first mailing, and to facilitate the removal of data provided by any participant, who wished to withdraw from

the study. Any documentation that matched codes with identifying information has been kept separately from the completed questionnaires and was only available to the researchers. Upon completion of the questionnaires, participants were requested to return the questionnaires to the principal researcher in an enclosed reply-paid envelope. Each questionnaire was checked to ensure that all items were filled in. At the conclusion of the data analysis, a summary report was provided to the VJA for racing officials and participants to view. No identifying information was made available to the VJA.

### Analysis

Raw data from the sections of the questionnaire on physical, mental and social issues were extracted. I analysed the data to determine the experiences of retired jockeys. I grouped data into physical, mental, and social forms of adjustment. I used descriptive statistical methods to examine the overall patterns of experience of retired jockeys. I compared the experiences of voluntary and involuntary retirees using t-tests, with the original  $\alpha = .05$  modified by Bonferroni corrections to recognise multiple comparisons for physical, mental, and social experiences. I examined the experiences of involuntarily retired jockeys, who had been retired for less than 10 years, between 10 and 20 years, and greater than 20 years, using a one-way ANOVA to compare physical, mental, and social experiences.

## CHAPTER 4: RESULTS

In this chapter, I describe aspects of the personal characteristics and experiences of retired jockeys. I then report differences between jockeys who retired voluntarily and jockeys whose retirement was involuntary. Next, I present the differences between involuntarily retired jockeys who had been retired for less than 10 years, between 10 and 20 years, and for more than 20 years. Within each of these three sections, in the first sub-section, I consider physical health issues that the participants reported they had experienced since retirement from riding (e.g., functional health and structural health). In the second sub-section, I address mental health issues, including the jockeys' self-beliefs (e.g., perception of control, self worth, and self-identity). In the third sub-section, I report on the jockeys' adaptive (e.g., social engagement, adoption of other interests) and/or non-adaptive (e.g., isolation) behaviours since retirement.

### Overall Patterns of Retirement from Riding

This section does not report new data. The results reported by Speed et al. (2001) for the whole sample of retired jockeys are presented here in terms of mean ratings which is different to the report in Speed et al., who cited only frequencies. These frequencies are also cited. Although conservative analysts argue that rating scales should not be analysed using parametric techniques, Speed et al. held the view is that this is acceptable, provided that the data does not depart substantially from normality. Mean ratings are employed for the purposes of comparison in later sections of the results chapter, so this data for the whole sample is included to contextualize means for specific

categories of retired jockeys that are reported in the following sections. Data generally do not show extreme deviations from normality.

### *Physical Health Issues of Retired Jockeys*

This section reports on the overall patterns of physical, mental, and social retirement experiences of the retired jockeys ( $N = 72$ ), who participated in, Speed et al.'s (2001) study. Given the physical demands of riding, it is not surprising that a substantial number of jockeys experienced a range of physical health problems following retirement. A large number of retired jockeys experienced functional and structural health problems, such as back problems (67%), hip problems (41%), arthritis problems (55%) and joint problems (41%). The means and standard deviations for physical health status experienced by retired jockeys, on the 12 physical health issues included in the Retired Jockeys Questionnaire (Speed et al.) are presented in Table 4.1. According to the absolute levels on a scale from 1 to 5, the means in Table 1 indicate that the participants found back (3.14), joint (3.11), arthritis (2.82), and hip (2.32) problems to be most disruptive. Vomiting for weight control, liver problems, and drug use for weight control were the least frequent physical issues assessed by the questionnaire.

### *Mental Health Issues of Retired Jockeys*

Specific mental health problem areas for some jockeys, following retirement, included difficulties forming an identity away from the racing industry (57%) and a lack of opportunity to form an identity outside the racing industry (46%). Further, a large number of jockeys experienced emotional distress (strong feelings) about leaving the

racing industry (39%) and a loss of self-confidence following retirement from the racing industry (32%).

*Table 4.1. Mean Physical Health Issues of Retired Jockeys*

Physical Health Issue	<i>M</i>	<i>SD</i>
Liver	1.11	0.45
Kidney	1.49	1.07
Immune system	1.46	0.97
Arthritis	2.82	1.63
Back	3.14	1.55
Hip	2.32	1.63
Joint	3.11	1.50
Osteoporosis	1.59	1.22
Dental	1.98	1.38
Weight gain	1.81	1.32
Drugs for weight control	1.41	0.92
Vomiting for weight control	1.08	0.53

The means and standard deviations for health status experienced by retired jockeys, on the seven mental health issues included in the questionnaire, are presented in Table 4.2.

Means indicated that none of the issues represented very serious problems, compared to the ratings associated with the most difficult physical problems. According

to the absolute levels on a scale from 1 to 5 the means in Table 4.2 indicate that identity difficulties after leaving racing (2.89) caused the most concern and lack of opportunities to form an identity outside racing (2.56) was also a frequent concern. Emotional distress related to gambling was the only area that the jockeys in the present study reported to be of little concern to them.

*Table 4.2. Means and Standard Deviations of Mental Health Issues of Retired Jockeys*

Mental Health Issue	<i>M</i>	<i>SD</i>
Emotional distress inability to cope	1.87	1.29
Emotional distress strong emotional feelings	2.27	1.41
Emotional distress low general self-confidence	1.81	1.16
Emotional distress gambling issues	1.33	0.74
Identity opportunities	2.56	1.42
Identity low self-confidence	2.02	1.23
Identity difficulties leaving racing industry	2.89	1.61

#### *Social Issues of Retired Jockeys*

Social support from family, friends, and significant others is very important in the retirement process (Lazarus & Folkman, 1984). Given the number of social health stressors associated with retirement, it is not surprising that a significant number of jockeys did experience difficulties with certain types of social support systems. A large number of retired jockeys (42%) identified losing contact with friends from the racing

industry as a problem. Many of the retirees in this study reported problems maintaining a social life within the racing industry (40%). Further, 37% of retired jockeys reported that the lack of opportunity to develop interests outside racing was a concern. Over 33% of jockeys found it difficult to establish new contacts outside the racing industry.

Table 4.3 illustrates the means and standard deviations for ratings made by the retired jockeys in this study on the 13 social issues. The means indicated that participants rated social issues a concern following retirement. According to the absolute levels on a scale from 1 to 5 the mean ratings provided by the retired jockeys in Table 4.3 indicate that the absence of support from the racing industry (2.48) and the lack of social contact with old racing friends (2.41) were of most concern. The retired jockeys reported that support from family and friends were least problematic among the social issues examined.

Results in this section indicate that, as a group, jockeys experienced physical, mental, and social issues that adversely affected their adjustment to retirement. Physical health problems, such as back, hip, and arthritis problems were reported by retired jockeys. Mental health problems, including lack of opportunity outside racing, difficulty in forming an identity outside the racing industry, and emotional distress leaving the racing industry, had a considerable impact on the adjustment to retirement for jockeys. Furthermore, social problems, such as losing contact with friends within the racing industry and the difficulty of maintaining a social life within the racing industry, also affected the jockeys' adjustment to retirement.

### Comparison of Voluntary and Involuntary Retirement

In this section, I compare the patterns of physical, mental, and social retirement experiences of jockeys, whose retirement was voluntary or involuntary, according to the criteria employed in the present analyses.

*Table 4.3. Means and Standard Deviations of Social Issues of Retired Jockeys*

Social Issue	<i>M</i>	<i>SD</i>
Support from friends	1.40	0.86
Support from family	1.46	1.03
Support from other jockeys	1.81	1.20
Support from racing industry	2.48	1.69
Family relationships	1.65	1.03
Family time commitments	1.66	1.08
Family responsibilities	1.74	1.17
Social isolation	1.84	1.10
Social difficulties developing new contacts outside racing	2.17	1.30
Social old racing friends	2.41	1.32
Interest opportunity	2.27	1.47
Interest low self-confidence	1.97	1.27
Interest low motivation	1.86	1.28

After explaining the classification of jockeys' retirement, I examine how the severity of personal distress, whether it was physical, social, or emotional differed, depending on the type of retirement that jockeys experienced (i.e., voluntary or

involuntary). This is addressed in the subsections of the Results chapter that follow. It should be noted that the size of the sample for voluntarily retired jockeys is quite small. Thus, comparisons between voluntary and involuntary retirees should be considered in the light of this limited group size.

The type of retirement, voluntary or involuntary, was determined according to the main reason for retiring reported by each participant in the open-ended part of the questionnaire package. Voluntary retirement was defined as a jockey experiencing retirement due to personal choice, financial reasons or lack of motivation. Involuntary retirement was defined as a jockey experiencing retirement due to injury, rides drying up or weight problems. Involuntary retirement ( $n = 59$ ), was the most common form of retirement. Injury (59%) and weight issues (31%) were reported as the most common reasons for involuntary retirement. Voluntary retirement ( $n = 13$ ), was reported on fewer occasions (18%), with personal choice (77%) reported as the most common form of voluntary retirement. Classification of voluntary and involuntary retirement and frequencies are illustrated in Table 4.4.

#### *Physical Health Issues*

Differences in physical health issues were found between jockeys who retired involuntarily and those whose retirement was voluntary. Over 74 % of jockeys who retired involuntarily reported that they suffered arthritis problems “sometimes” (29%), “often” (14%), or “very frequently” (30%). Of those jockeys who retired voluntarily, over 69% reported that they did not experience arthritis problems at all. Similar differences between the two groups were seen in relation to joint problems. Of those jockeys who retired involuntarily, over 71% reported that they experienced back

*Table 4.4. Main Reasons for Retirement of Jockeys*

<u>Reason</u>	<u>Number of Jockeys</u>	<u>%</u>
Voluntary		
Personal choice	10	77
Financial Reasons	1	8
Lack of motivation	2	15
Total	13	100
Involuntary		
Injury	35	59
Deselection - rides drying up	6	10
Weight Problems	18	31
Total	59	100

problems “sometimes” (26%), “often” (12%), or “very frequently” (33%). Over 53% of those who retired voluntarily also reported that they experienced back problems “sometimes” (23%), “often” (15%), or “very frequently” (15%). It is important to note that those jockeys who retired involuntarily reported experiencing back problems “very frequently”, twice as often as those jockeys who retired voluntarily. In relation to joint problems, over 71% of those jockeys who retired involuntarily experienced joint problems, in comparison to 50% of those jockeys who retired voluntarily.

The means, standard deviations, t-test values, significance levels, and effect sizes for each physical health issue for involuntarily and voluntarily retired jockeys are presented in Table 4.5. An independent samples t-test was calculated for each physical

health problem. It must be borne in mind that Table 4.5 reports the results of multiple tests. One technique to address this issue is to apply a Bonferroni correction to the significance level of the tests. The Bonferroni corrected significance level for the comparisons shown in Table 4.5 is  $p < .0042$  ( $p = .05$  divided by 12 comparisons). Using this criterion, significant differences were reported for kidney problems ( $p < .001$ ), immune system problems ( $p < .001$ ), arthritis problems ( $p < .001$ ), and osteoporosis problems ( $p < .001$ ). Large effect sizes (Cohen, 1988) were found for arthritis, osteoporosis, immune system problems, and kidney problems. Medium to large effect sizes were found for joint and liver problems. In all cases, jockeys who retired involuntarily reported greater severity of health problems than jockeys who retired voluntarily.

#### *Mental Health Issues*

Differences were found in mental health related issues of jockeys who had retired involuntarily and those who had retired voluntarily. Mental health status differed considerably between the two types of retirement. Of those jockeys who retired involuntarily, 67% reported identity difficulties after leaving the racing industry was “sometimes” (23%), “often” (13%), or “very much” (31%) a problem. Of those jockeys who retired voluntarily, only 24% reported identity difficulties after leaving the racing industry. Participants reported that identity difficulties after leaving the racing industry was “sometimes” (8%), “often” (8%), or “very much” (8%), a problem. Lack of opportunity to develop an identity outside racing was also a problem for jockeys, who retired involuntarily.

Over 56% of jockeys, who retired involuntarily, reported that a lack of opportunity to develop an identity was “sometimes” (24%), “often” (14%), or “very much” (16%), a problem, compared to only 14% of jockeys who retired voluntarily. Further, 45% of those jockeys who retired involuntarily reported strong feelings of emotional distress following retirement, in comparison to only 13% of jockeys who retired voluntarily.

*Table 4.5. Differences Between Physical Health Issues of Voluntarily and Involuntarily Retired Jockeys*

Physical Health Issue	<u>Voluntary</u>		<u>Involuntary</u>		t	p	d
	M	SD	M	SD			
Liver	1.00	0.00	1.14	0.51	-0.96	0.342	0.38
Kidney	1.00	0.00	1.63	1.18	-3.62	.001*	0.77
Immune system	1.00	0.00	1.59	1.07	-3.73	.001*	0.79
Arthritis	1.54	0.97	3.13	1.61	-4.59	.001*	1.39
Back	2.69	1.49	3.26	1.56	-1.17	0.246	0.48
Hip	1.92	1.55	2.42	1.64	-1.02	0.322	0.40
Joint	2.33	1.23	3.29	1.51	-2.02	0.046	0.86
Osteoporosis	1.00	0.00	1.75	1.33	3.74	.001*	0.82
Dental	1.58	1.24	2.09	1.41	-1.13	0.265	0.48
Weight gain	1.38	1.21	1.92	1.35	-1.32	0.193	0.54
Use of weight control drugs	1.08	0.28	1.50	1.01	-1.49	0.013	0.59
Vomiting	1.00	0.00	1.10	0.59	-0.63	0.531	0.25

NOTE: \* represents p value significant based on Bonferroni correction, so  $p < .0042$ .

The means, standard deviations, t-test values, probabilities, and effect sizes for involuntary and voluntary retired jockeys for mental health issues are presented in Table 6. An independent samples t-test was calculated for each mental health issue. Again, it must be pointed out that Table 4.6 reports the results of multiple significance tests. Thus, the Bonferroni correction was applied to each t-test. The Bonferroni corrected significance level for the comparisons shown in Table 4.6 is  $p < .0071$  ( $p = .05$  divided by 7). Using this criterion, significant differences were reported for emotional distress, strong emotional feelings, low general self-confidence, and identity difficulties leaving the racing industry.

Large effect sizes were observed for difficulties with identity after leaving the racing industry, lack of opportunity to develop an identity outside racing, strong feelings about leaving the racing industry, and low general self-confidence following retirement. Medium effect sizes were noted for types of emotional distress, namely, inability to cope and gambling issues. Once again, in all cases of mental health, jockeys who retired involuntarily reported a higher level of concern with these issues.

#### *Social Issues*

Differences in social status were found between jockeys who retired involuntarily and those whose retirement was voluntary. The pattern of social status differed noticeably between the two types of retirement. Over 49% of jockeys who

Table 4.6. Differences Between Mental Issues of Voluntarily and Involuntarily Retired Jockeys

Mental Health Issue	Voluntary		Involuntary		<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Emotional distress inability to cope	1.38	0.77	2.00	1.37	-1.55	.041	0.63
Emotional distress strong emotional feelings	1.38	0.77	2.49	1.45	-2.65	.001*	1.07
Emotional distress low general self-confidence	1.23	0.44	1.96	1.24	-2.07	.001*	0.83
Emotional distress gambling issues	1.07	0.28	1.40	0.81	-1.41	.023	0.56
Identity opportunities	1.76	1.30	2.76	1.40	-2.31	.024	0.94
Identity low self-confidence	1.85	1.21	2.06	1.24	-0.56	.576	0.23
Identity difficulties leaving racing industry	1.76	1.36	3.19	1.55	-2.99	.004*	1.22

NOTE: \* represents *p* value significant based on Bonferroni correction, so  $p < .0071$ .

retired involuntarily ( $n = 59$ ), reported that social support from the racing industry was “sometimes” (10%), “often” (8%), or “very much” (31%) a problem, whereas, over 92% of jockeys who retired voluntarily ( $n = 13$ ), reported that they did not experience problems “at all” with social support from the racing industry. Almost half of the involuntarily retired jockeys (49%) experienced problems with social support from old racing friends “sometimes” (21%), “often” (16%), or “very often” (12%) whereas, only 15% of voluntarily retired jockeys experienced problems “sometimes”. Further, 38% of jockeys, who retired involuntarily, reported that the lack of opportunity to develop interests outside racing was a problem “sometimes” (15%), “often” (13%), or “very much” (15%), and only 14% of those jockeys who retired voluntarily reported such problems. Similarly, 38% of jockeys, who retired involuntarily, reported that they had problems developing new friends outside the racing industry and only 13% of those jockeys, who retired voluntarily, reported issues with new friendships.

The means and standard deviations for involuntarily and voluntarily retired jockeys for social health issues are presented in Table 4.7. Table 4.7 also presents t-test values, probabilities, and effect sizes for each issue. The greatest differences between those jockeys who retired involuntarily and those who retired voluntarily were found in the area of social support. An independent samples t-test was calculated for each social health problem. Because multiple comparisons were made, the Bonferroni correction was applied. The Bonferroni corrected significance level for the comparisons shown in Table 4.7 is  $p < .0038$  ( $p = .05$  divided by 13 comparisons). Using this criterion, significant differences were reported in relation to problems with support from friends, support from family, support from jockeys, support from the racing industry, and social isolation. Large effect sizes were found for support from other jockeys, support from the

racing industry, social isolation, social difficulties developing new contacts outside of racing, and social contact with old racing friends. Medium to large effect sizes (Cohen, 1988) were observed in the areas of support from friends, support from family, and opportunity to develop interests whilst riding. In all cases of social issues, jockeys who retired involuntarily reported a higher degree of social problems than jockeys who retired voluntarily.

The results in this section indicate that involuntarily retired jockeys experienced greater adjustment to retirement difficulties than jockeys whose retirement was voluntary. As a group, involuntarily retired jockeys reported more physical health problems, such as arthritis, back and joint problems. Mental health issues, including difficulty forming an identity outside the racing industry and lack of opportunity to develop an identity outside the racing industry had a considerable impact on the adjustment to retirement for involuntarily retired jockeys in comparison to voluntarily retired jockeys. Furthermore, social problems, such as lack of social support from the racing industry and old racing friends, and lack of opportunity to develop interests outside the racing industry, affected involuntarily retired jockeys more than voluntarily jockeys adjustment to retirement.

According to the sizes of the mean ratings on a scale from 1 to 5, the differences in mean ratings between involuntarily and voluntarily retired jockeys were substantial for mental and social issues. Sizes of differences in mean ratings for physical issues, however, were moderate.

Table 4.7. Differences Between Social Issues of Voluntarily and Involuntarily Retired

*Jockeys*

Social Issues	Voluntary		Involuntary		t	p	d
	M	SD	M	SD			
Support from friends	1.00	0	1.51	0.94	-1.95	.001*	0.78
Support from family	1.00	0	1.58	1.13	-1.85	.001*	0.74
Support from other jockeys	1.08	0.28	2.00	1.28	-2.57	.001*	1.04
Support from racing industry	1.08	0.28	2.84	1.71	-3.68	.001*	1.50
Family relationships	1.46	0.78	1.70	1.09	-0.74	0.463	0.30
Family time commitments	1.62	0.96	1.67	1.12	-0.15	0.881	0.06
Family responsibilities	1.46	0.66	1.82	1.27	-0.97	0.336	0.39
Social isolation	1.23	0.44	2.00	1.17	-2.32	.001*	0.93
Social difficulties	1.46	0.78	2.36	1.35	-2.29	0.004	0.93
developing new contacts							
outside racing							
Social old racing friends	1.69	0.75	2.59	1.37	-2.26	.030*	0.91
Interest opportunity	1.69	1.18	2.43	1.51	-1.61	0.076	0.66
Interest low self-confidence	1.69	1.18	2.04	1.30	-0.88	0.38	0.36
Interest low motivation	1.38	0.65	2.00	1.38	-1.55	0.029	0.63

NOTE: \* represents p value significant based on Bonferroni correction, so  $p < .038$ .

### Comparison of Adjustment by Duration of Retirement

This section reports on the overall patterns of physical, mental, and social retirement experiences of involuntarily retired jockeys, who had been retired for less than 10 years, between 10 and 20 years, and more than 20 years. This tricotomisation is acknowledged to be somewhat arbitrary. There are, however, few guidelines on which to base a division by duration of retirement. Although a person who has been retired for 9 years might have more in common with one that has been retired for 11 years, than with a 3-year retiree, differences that emerge from these coarse groupings reflect the possibility that larger differences might arise in more fine-grained analyses, which should be undertaken in future research. This analysis was conducted to examine whether that the frequency of personal distress, be it physical, social, or emotional, differs depending on the duration of retirement the jockey has experienced (Speed et al., 2001).

#### *Physical Health Issues*

Differences in physical health status were found between involuntarily retired jockeys, who had been retired for less than 10 years, between 10 and 20 years, and greater than 20 years. The pattern of physical health differed considerably between the three periods of retirement. Of those jockeys who had been retired for less than 10 years ( $n = 23$ ), over 80% reported experiencing back problems “sometimes” (26%), “often” (30%), or “very frequently” (26%). Of those jockeys who had been retired for greater than 20 years ( $n = 14$ ), over 71% reported experiencing back problems “sometimes” (24%), or “very frequently” (47%), whereas, jockeys who had been involuntarily retired for between 10 and 20 years ( $n = 22$ ), only 51% reported experiencing back problems

less often, percentages being “sometimes” (17%), “often” (17%), or very frequently (17%). Further, only 53% of jockeys, who had been involuntarily retired for between 10 and 20 years, reported experiencing joint problems, in comparison to 81% of those jockeys who had been involuntarily retired for less than 10 years, and 70% of those jockeys who had been involuntarily retired for greater than 20 years.

The means and standard deviations for physical health issues of involuntarily retired jockeys, who had been retired for less than 10 years, between 10 and 20 years, and greater than 20 years are presented in Table 4.8. This table also presents the results of one-way analysis of variance (ANOVA) conducted for each issue. In the ANOVAs, there was one independent group variable, duration of retirement, with three levels, less than 10 years, between 10 and 20 years, and greater than 20 years, and the independent variable was ratings for the specific physical health issue.

A one-way ANOVA was conducted to compare differences in physical health between involuntarily retired jockeys who had been retired for less than 10 years, between 10 and 20 years, and greater than 20 years. Although there were no statistically significant differences, with regard to physical health issues, between jockeys who had been involuntarily retired for different durations, medium sized effects were found for joint and back issues. Jockeys, who had been involuntarily retired for between 10 and 20 years, reported less frequent joint and back issues, than did jockeys who had been involuntarily retired for less than 10, or greater than 20, years. Medium to large effect sizes were found for joint problems. There were small to medium effect sizes found for vomiting, liver, hip, and back problems.

*Table 4.8. Differences Between Physical Health Issues for Involuntarily Retired Jockeys of Less Than 10 Years, Between 10 and 20 Years, and Greater Than 20 Years*

Physical Health Issue	<u>Less than 10</u>		<u>Btwn 10 and 20</u>		<u>Greater than 20</u>		F	p	R <sup>2</sup>
	M	SD	M	SD	M	SD			
Liver	1.05	0.23	1.30	0.95	1.13	0.35	0.64	0.5	0.02
Kidney	1.75	1.29	1.45	1.04	1.60	1.18	0.29	0.8	0.01
Immune system	1.68	1.11	1.67	1.07	1.40	1.06	0.30	0.7	0.01
Arthritis	3.09	1.7	2.92	1.68	3.33	1.50	0.41	0.7	0.01
Back	3.57	1.43	2.77	1.69	3.24	1.60	1.20	0.3	0.04
Hip	2.71	1.68	2.23	1.69	2.19	1.60	0.75	0.5	0.02
Joint	3.57	1.24	2.58	1.62	3.41	1.70	2.70	0.1	0.08
Osteoporosis	1.67	1.33	1.82	1.60	1.80	1.21	0.03	1.0	0.00
Dental	2.00	1.19	2.25	1.49	2.06	1.65	0.26	0.8	0.01
Weight gain	1.91	1.20	2.31	1.55	1.60	1.40	0.97	0.4	0.03
Use of weight control									
drugs	1.41	0.85	1.82	1.47	1.40	0.83	0.43	0.7	0.01
Vomiting	1.05	2.13	1.36	1.21	1.00	0.00	1.30	0.3	0.04

#### *Mental Health Issues*

Reports of mental health issues following involuntary retirement differed for those jockeys who had been retired for less than 10 years, between 10 and 20 years, and greater than 20 years. Mental health status differed markedly between the three periods

of retirement. Of those jockeys who had been involuntarily retired for between 10 and 20 years, 91% reported that their identity leaving the racing industry was a problem “sometimes” (17%), “often” (33%), or “very much” (41%). Of those jockeys who retired involuntarily for less than 10 years, or greater than 20 years, however, fewer problems with identity leaving the racing industry were reported, 57% and 60% respectively. Of those jockeys who had been involuntarily retired for between 10 and 20 years, 72% reported experiencing problems with opportunities to developing an identity outside racing, in comparison to those jockeys, who retired involuntarily for less than 10 years (52%), or greater than 20 years (44%). Similarly, 67% of jockeys who had been involuntarily retired for between 10 and 20 years, reported experiencing problems with strong emotional feelings, “sometimes” (42%), “often” (17%) or “very frequently” (8%), in comparison to jockeys who had been involuntarily retired for less than 10 years (41%), or greater than 20 years (36%). Furthermore, 60% jockeys who had been involuntarily retired for between 10 and 20 years, reported experiencing problems with identity self confidence, “sometimes” (40%), or “often” (20%). In comparison, fewer problems were reported by other involuntarily retired jockeys. Only 27% of jockeys who had been involuntarily retired for less than 10 years, reported experiencing problems, “sometimes” (13%), “often” (7%) or “very frequently” (7%). Of those jockeys who had been retired for greater than 20 years, 27% reported experiencing problems, “sometimes” (18%) or “very frequently” (9%).

The means and standard deviations for mental health issues of involuntarily retired jockeys, who had been retired for less than 10 years, between 10 and 20 years, and greater than 20 years, are presented in Table 4.9. Also included in Table 4.9 are the results of an ANOVA for each mental health issue. Medium to large effect sizes were

found for emotional distress, strong emotional feelings, low general self-confidence, and identity difficulties leaving the racing industry. Small effect sizes were found for emotional distress, inability to cope, identity opportunities, and low self-confidence.

### *Social Issues*

Reports of social health issues following involuntary retirement differed for those jockeys, who had been retired for less than 10 years, between 10 and 20 years, and greater than 20 years. Social issues differed modestly between the three periods of retirement. Of those jockeys who had been involuntarily retired for between 10 and 20 years, 36% experienced problems with motivation in developing other interests, reporting problems, “sometimes” (18%), “often” (9%), or “very frequently” (9%), in comparison to those jockeys who had been retired for less than 10 years (20%), or greater than 20 years (27%). Of those jockeys, who had been involuntarily retired for less than 10 years, 38% reported problems with family relationships, “sometimes” (24%), or “very frequently” (14%). Jockeys who had been retired for between 10 and 20 years, or greater than 20 years, however, only experienced problems 16% and 4.5% respectively.

Table 4.9. Differences Between Mental Health Issues for Involuntarily Retired Jockeys for Less than 10 years, Between 10 and 20 Years, and Greater than 20 Years

Mental Health Issue	Less than 10		Btwn 10 and 20		Greater than 20		F	P	R <sup>2</sup>
	M	SD	M	SD	M	SD			
Emotional distress									
Inability to cope	2.19	1.66	1.83	1.03	1.88	1.20	0.80	.45	.027
Emotional distress strong emotional feelings	2.64	1.69	2.92	1.08	2.00	1.41	1.70	.20	.052
Emotional distress low general self-confidence	1.90	1.30	2.67	1.30	1.53	0.94	2.50	.09	.077
Emotional distress gambling issues	1.48	0.93	1.25	0.62	1.41	0.76	0.16	.85	.005
Identity opportunities	2.61	1.23	3.27	1.10	2.63	1.75	0.53	.59	.017
Identity low self-confidence	1.91	1.27	2.70	0.95	1.87	1.30	0.78	.47	.027
Identity difficulties leaving racing industry	2.71	1.45	4.00	1.00	3.13	1.81	2.70	.08	.084

The means and standard deviations for social issues of involuntarily retired jockeys, who had been retired for less than 10 years, between 10 and 20 years, and greater than 20 years, are presented in Table 4.10. This table also presents the results of one-way analysis of variance (ANOVA) conducted for each issue. In the ANOVA's there was one independent group variable, duration of retirement, with three levels, less than 10 years, between 10 and 20 years, and greater than 20 years, and the independent variable was ratings for the specific social issue.

A one-way ANOVA was conducted to compare differences in social issues between involuntarily retired jockeys who had been retired for less than 10 years, between 10 and 20 years, and greater than 20 years. Although there were no statistically significant differences, with regard to social issues, between jockeys who had been involuntarily retired for less than 10 years, these different durations, large effects sizes were found for low motivation in interests outside racing and family relationships, medium sized effects were found for family responsibilities, and small sized effects were found for family time commitments and interests, and for low self-confidence. Jockeys, who had been involuntarily retired for greater than 20 years, reported more problems with low motivation in interests outside the racing industry than did jockeys, who had been involuntarily retired for less than 10 or between 10 and 20 years. Jockeys, who had been involuntarily retired for less than 10 years, reported more issues with family relationships, family responsibilities and family time commitments than did jockeys, who had been retired for between 10 and 20 and greater than 20 years. Jockeys, who had been retired for between 10 and 20 years reported more problems with low self-confidence in interests outside racing, than did jockeys who had been retired for less than 10, and greater than 20 years. Medium to large effect sizes were found for family

relationships, and low motivation in developing interests outside racing. Small to medium effect sizes were found for support from the racing industry, family time commitments, opportunities to develop interests outside racing and low self-confidence in interests outside the racing industry.

Results in this section indicate that, as a group, jockeys who had been involuntarily retired for less than 10 years or greater than 20 years experienced greater physical health issues than those jockeys who had been retired between 10 and 20 years. Jockeys who had been involuntarily retired for between 10 and 20 years, however, reported considerably more difficulties with mental issues.

Results reported in this chapter show that there are a number of physical, mental, and social problems experienced by jockeys following retirement. Involuntarily retired jockeys experienced more physical, mental, and social issues than voluntarily retired jockeys. Results examining differences between adjustment related to the length of retirement of involuntarily retired jockeys, suggested that jockeys who had been retired for less than 10 years or greater than 20 years, experienced notably more severe physical health issues than those jockeys who had been involuntarily retired between 10 and 20 years. Jockeys, who had been involuntarily retired for less than 10 years, experienced more problems with social issues than jockeys who had been involuntarily retired for between 10 and 20 years or greater than 20 years.

*Table 4.10. Differences Between Social Issues for Involuntarily Retired Jockeys of Less than 10 Years, Between 10 and 20 Years and Greater than 20 Years*

Social Issue	Less than 10		Btwn 10 and 20		Greater than 20		F	p	R <sup>2</sup>
	M	SD	M	SD	M	SD			
Support from friends	1.50	0.91	1.55	0.82	1.50	1.10	.00	1.0	.000
Support from family	1.64	1.05	1.55	1.04	1.53	1.33	.08	.93	.003
Support from other jockeys	1.87	1.18	2.09	1.30	2.13	1.46	.23	.86	.005
Support from racing industry	2.74	1.69	3.42	1.78	2.56	1.71	.63	.54	.020
Family relationships	2.10	1.14	1.46	0.97	1.38	1.03	2.9	.06	.089
Family time commitments	1.80	1.11	1.75	1.22	1.44	1.09	.84	.44	.028
Family responsibilities	2.20	1.44	1.62	0.96	1.50	1.21	1.8	.17	.059
Social isolation	2.09	1.34	2.09	1.04	1.80	1.01	.27	.77	.009
Social difficulties developing new contacts outside racing	2.39	1.27	2.33	1.37	2.33	1.54	.05	.95	.002
Social old racing friends	2.39	1.08	2.75	1.60	2.75	1.61	.52	.60	.017
Interest opportunity	1.90	1.21	3.00	1.90	2.67	1.68	.53	.59	.017
Interest low self-confidence	1.85	1.23	2.36	1.36	2.07	1.39	.78	.47	.027
Interest low motivation	1.75	1.25	2.18	1.40	2.20	1.57	2.7	.08	.084

## CHAPTER 5: DISCUSSION

In this chapter, I, first, consider the experiences and adjustments of jockeys following retirement from horse racing. I then discuss the adjustment differences between jockeys, who retired voluntarily, and those jockeys, who retired involuntarily. Next, I consider the adjustment experiences of involuntarily retired jockeys, who had been retired for less than 10 years, between 10 and 20 years, and for more than 20 years, representing a developmental perspective on retirement from horse racing. Within each of these major sections there are three main sub-sections, in the first sub-section, I discuss the physical health issues that the participants reported they have experienced since retirement from riding (e.g., functional health and structural health). In the second sub-section, I address mental health issues, including the jockeys' self-beliefs (e.g., perception of control, self worth, and self-identity); and, in the third sub-section, I examine the jockeys' adaptive (e.g., social engagement, adoption of other interests) and/or non-adaptive (e.g., isolation) behaviours since retirement. Following this discussion of the conclusions from the research, I address the relationship of the findings to theory and the existing research on retirement from sport. I then consider methodological issues raised by this study, followed by future research suggested by the findings. Finally, I discuss the implications arising from the present study for improving the support for professional horse racing jockeys in relation to retirement.

## Summary of Results

### *Patterns for the Whole Sample*

#### *Physical Health Issues of Retired Jockeys*

A large number of retired jockeys experienced functional and structural health problems, such as back, hip, arthritic, and, joint problems. These physical health problems are likely to be more prevalent for jockeys, resulting from falls and the constant force and impact on joints and bones that jockeys experience almost every day of their riding career (Lippincott-Williams & Wilkins, 2001). Given the physical demands of riding, and the absence of traditional sporting 'off-seasons' that characterise most professional sports, it is not surprising that functional and structural problems due to wear and tear, as well as after effects of specific trauma, persist for jockeys, once their riding career ends.

#### *Mental Health Issues of Retired Jockeys*

In addition to the number of physical health issues, retired jockeys experienced problems of a psychological nature. Retirement from riding was a traumatic event for many of the jockeys and this caused emotional distress after they left the racing industry. The sense of negative emotions following retirement was reported to be a direct result of frustration of the many losses experienced by the jockey, including the loss of close friends, financial income, and, self-identity. Interestingly, difficulties forming an identity outside the racing industry, and the lack of opportunity to do so, were major problems of concern for retired jockeys in this study. As mentioned previously, the lack of an 'off-season' and the necessary commitment to racing, because race meetings occur seven

days a week and there is often substantial travelling from one meeting to the next, severely limited the opportunity jockeys had to develop interpersonal relationships with people not in the racing industry and to establish an identity outside racing. Loss of self-confidence was also reported as a concern for one-third of retired jockeys. The decline in self-confidence may be due to jockeys determining their self-worth, to a large extent based on the attribute of being a professional jockey. Once this attribute no longer exists, self-confidence is likely to be reduced. Little support by the industry and the absence of recognition for the skills of jockeys in society generally also diminish self-confidence in retired jockeys.

#### *Social Issues of Retired Jockeys*

A large number of retired jockeys reported problems related to losing contact with friends from the racing industry, maintaining a social life within the racing industry, developing interests outside the racing industry, and establishing new contacts outside the racing industry. Losing contact with friends from the racing industry and difficulties maintaining a social life within the racing industry are likely to cause problems for retired jockeys in terms of self-worth and self-identity. Unfortunately, there are few opportunities for retired jockeys to meet ex-colleagues, who continue to work in the racing industry. Reasons for this might include the lack of support services in place to organise social events for past and present members of the racing industry to meet. Also, long hours and strict discipline, may restrict contact between present racing industry members and retired jockeys. Ex-colleagues may not have time to support recently-retired jockeys, because the retirees are likely to be attending race meetings up to seven days a week, as well as traveling and preparing themselves for race meets.

Maintaining a social life within the racing industry, therefore, may become increasingly difficult for retired jockeys. Retired jockeys may also have fewer opportunities to keep in contact with members of the racing industry, because they are addressing new or other responsibilities, which include family commitments, developing new skills or a new career, and/or growing their social support network outside the racing industry.

Developing new interests and establishing new contacts outside the racing industry can be particularly difficult for retired jockeys. This is primarily problematic, because, in a new and unfamiliar environment, with little or no support, there is little sense of security and belonging, and most programs and services offered to jockeys are aimed primarily at apprentice jockeys. Also, because jockeys rarely consider life beyond a riding career, they may not have psychologically or socially prepared for retirement by investing time, energy, and self-identity into other interests, hobbies, or occupations (Speed et al., 2001).

### *Comparison of Voluntary and Involuntary Retirement*

#### *Physical Health Issues*

Differences in physical health following retirement varied with the type of retirement, namely voluntary or involuntary retirement, and more specifically, the form of involuntary retirement. Back and joint problems were reported to be more prevalent by jockeys, who retired involuntarily, compared to those who retired voluntarily. These physical health issues were often associated with falls that caused injury. If jockeys take time out to recover, they run the risk of rides drying up. If insufficient time is taken to recover, jockeys risk on-going problems that result from training and racing while they

are injured. Ultimately, this can lead to involuntary retirement due to injury. Injury, therefore, may be tolerated for short periods, but, may have a long-term, or even a career-ending, effect. Due to the high risk and physically demanding nature of horse racing (DeBenedette, 1987) jockeys are more prone to involuntary retirement than athletes in other sports, for example, tennis (Allison, & Meyer, 1988). Given the large proportion of involuntary retirees in this study, whose main reason for retiring was injury, it is not surprising that involuntary retirees overall reported a higher level of problems with the sorts of muscular/skeletal injuries that often lead to retirement.

### *Mental Health Issues*

According to their responses, mental health status differed considerably between voluntarily and involuntarily retired jockeys. Involuntary retirees reported experiencing retirement from riding as a much more psychologically negative or stressful event than those who retired voluntarily. For involuntarily retired jockeys, strong feelings and emotional distress may be related to ongoing back and joint pain, which many of them reported that they suffered due to injury. Low general self-confidence that was reported by involuntary retirees in particular, is also likely to stem from a combination of the problems with self-identity and emotional distress. Emotional distress may also be related to low satisfaction with the new life outside racing. The sudden nature of involuntary retirement is likely to preclude jockeys from preparing for exposure to a new world which incorporates a less familiar working environment and the need to develop new social contacts (Speed et al., 2001). Furthermore, involuntary retired jockeys are likely to be less prepared for unexpected retirement due to causes such as injury, rides drying up, or a combination of both. Less preparation for retirement, including utilising

resources for future employment and establishing new social contacts outside racing, therefore, is likely to cause greater emotional problems such as distress and low general self-confidence for involuntarily retired jockeys. In order to meet financial and/or social requirements following retirement, however, involuntarily retired jockeys may be forced into less fitting employment and/or social groupings.

Jockeys who retired involuntarily experienced more significant problems with self-identity after leaving the racing industry than those whose retirement was voluntary. Because retirement for the overwhelming majority of jockeys was involuntary and unplanned, few jockeys would have had the opportunity to develop an identity outside racing. According to Webb et al. (1998), involuntary retirement (e.g., injuries) may preclude opportunities for the athlete to psychologically prepare for retirement by divesting from their athletic identity and reinvesting in some other identity opportunity. During their careers, the self-esteem of many jockeys was probably largely gained from their status as professional riders. After retiring, most jockeys are likely to seek self-esteem through association with the racing industry. Due to the sudden, unexpected nature of most involuntary retirement, the opportunity to gain social support and maintain relationships within the racing industry, is likely to be limited by immediate and future family, financial, social, and/or employment/career plans. This may affect long-term relationships with ex-colleagues and the self-confidence of retired jockeys, particularly those who retired involuntarily.

### *Social Issues*

When compared with voluntarily retired jockeys, involuntarily retired jockeys reported experiencing more problems related to lack of support from the racing industry,

difficulty maintaining links with old racing friends, absence of opportunities to develop new interests outside of racing, and, obstacles to developing new friends outside the racing industry. Perceived lack of support from the racing industry indicates that for those who retire involuntarily, there may not be effective or appropriate support services and resources to help retired jockeys adjust physically, emotionally, and socially to retirement (Speed et al., 2001). Lack of social support from old racing friends may be a direct consequence of the type of retirement. In the case of involuntary retirement, where career termination is likely to be immediate, people may not be aware that a jockey has retired. Thus support from within the racing industry may be limited. Also, due to the demanding lives of jockeys and staff involved in the racing industry, there may not be time to support others who are now outside the racing industry fraternity.

Although some retired jockeys, predominantly voluntarily retired jockeys, leave the social networks developed during their riding career, and move successfully into new social groups, a substantial number of retired jockeys, particularly involuntarily retired jockeys, experience difficulties in developing new interests outside the racing industry and in establishing new social contacts outside racing, once they retire. Due to lack of planning of their post-riding lives and the unexpected nature of involuntary retirement, jockeys who retired involuntarily may have had little opportunity to develop interests and new friends outside the racing industry, in comparison to voluntary retirees, who had a longer period of time to create and shape opportunities for future employment, and to prepare a stable financial framework and social support network.

*Comparison of Adjustment by Duration of Retirement**Physical Health Issues*

There were small differences in physical health between the three groups of involuntarily retired jockeys. The responses of jockeys in the three retirement duration categories suggested that back and joint issues were more common for those jockeys, who had recently retired (less than 10 years) and those who had been retired for an extended period of time, more than 20 years. Joint and back problems may be more prevalent for involuntarily retired jockeys early in retirement due to non-resolution of injuries received during their riding career. Also, because the involuntary category includes jockeys, who had a career-ending injury, it would seem to be more likely that the involuntary retirees would report more continuing physical difficulties in the period soon after retirement. For those jockeys who had been retired for an extended period of time, more than 20 years, (between 20 and 41 years), and are likely to be close to typical workforce retirement age, back and joint problems are also likely to be associated with the ageing process and may be related to a sedentary lifestyle and decline in physical activity.

*Mental Health Issues*

The three groups of involuntarily retired jockeys reported different levels of mental health concerns. Those jockeys who had been involuntarily retired for between 10 and 20 years reported more problems with their self-identity after leaving the racing industry, stronger feelings and emotional distress, and lower general self-confidence than those jockeys who had been retired for less than 10 years or more than 20 years.

Particular problems with self-identity for jockeys retired between 10 and 20 years indicates that this period is often one of transition for jockeys' identity. Over the first 10 years, the retired jockeys may have been able to hold onto their identity as a jockey to some extent and, after 20 years of retirement, the retired jockeys are likely to have had a number of opportunities to develop new interests, establish a career outside the racing industry, and spend more time with family and friends, resulting in a new or more established non-racing identity. As the years go by, it is likely that jockeys will find it harder to hold onto their identity as a jockey, so the need for social contacts outside racing increases. Creating a new identity outside the racing industry, may be a very positive development, because it may assist those jockeys to establish a new career and/or develop a friendship support network outside the racing industry.

Not surprisingly, involuntarily retired jockeys, who had been retired for less than 10 years, reported more problems than the more experienced retirees. The unforeseen nature of involuntary retirement may preclude opportunities for jockeys to prepare emotionally for the transition into retirement. The problems faced by retirees are common, including poor physical health, mental health problems, particularly emotional distress, loss of personal identity, loss of status, sense of not being valued by the racing industry. It is likely to be overwhelming for a retired jockey to experience all these changes at once. Also, unless there is a development structure and coping resources are available for adjustment to life following retirement from riding, recently retired jockeys may feel abandoned and overcome by so many changes and pressures.

*Social Issues*

There were differences in social issues between the three groups of involuntarily retired jockeys. Jockeys, who had been retired for more than 20 years, experienced lower motivation in developing interests outside of racing (e.g., other sports, hobbies) than more recently retired jockeys. Again, a lack of post-retirement planning and opportunity to develop interests and skills outside of riding, during their career, may have prevented these jockeys from exploring various options for employment and general hobbies that could provide motivation. The small skill sets acquired by jockeys that result from specialisation at an early age, and limited formal education, are also likely to limit the number of options available to retired jockeys. Being forced into a second career, that will often be less recognised by friends, family, or society, may be de-motivating. Also, if jockeys are not competent at the required tasks of new jobs or not given challenges similar to those of competitive, professional sport, then employment would be less satisfying and less motivating than during their riding career. Furthermore, due to their limited formal education, it is unlikely that most retired jockeys would not earn financial remuneration similar to that which they received as a jockey.

Not all involuntarily retired jockeys experienced retirement from riding as a negative or stressful period in their life. Some retired jockeys found opportunities to engage in, or extend, family relationships and commitments. Jockeys, who had been retired for between 10 and 20 years, however, reported greater problems associated with low self-confidence than those jockeys, who had recently retired or had been retired for an extended period of time. One reason why low self-confidence in developing interests outside racing could have been a concern at this point of retirement may be linked to

issues with financial security and job satisfaction. Low self-confidence could be related to the limited job skills that many jockeys possess on retirement and the lack of opportunities for ex-jockeys to develop new skills during the early years following departure from the racing industry. Also, jockeys, who had been involuntarily retired for less than 10 years, experienced more family-related problems, including developing and maintaining family relationships, responsibilities, and time commitments. Due to the lifestyle of working jockeys and commitments associated with riding (e.g., race meetings and travel from one meeting to the next), jockeys are likely to spend little time at home with their families during their career. Thus, during the early years of retirement ex-jockeys might adjust physically and psychologically to their changing role in the family. Financial difficulties could also have contributed to the low levels of self-reported social well-being of involuntarily retired jockeys less than 10 years. That in turn could adversely affect significant relationships (e.g., close friends). Also, added stressors, including developing skills outside the racing industry, growing a new social network, and creating a new identity, are likely to have affected family relationships and other family related problems.

#### Relationship of this Study to Theory and Existing Research

##### *Overall Retirement from Riding*

##### *Physical Health Issues*

According to Mihovilovic (1968), because of the natural physical deterioration that accompanies middle age, athletic performance will decrease and retirement for many athletes is inevitable. In relation to this study, retirement is even more likely for

jockeys, because they are faced with the risk of career-ending injury every day. It is important to note, however, that some jockeys continue to ride at the top level into their autumn years.

Retirement due to injury may have long-term physical effects following retirement from riding. Consistent with the present study, Ogilvie and Howe (1982) found that physical ramifications of sport retirement may include permanent physical damage to bones, cartilage, ligaments, and nerves, as well as arthritis. Second, injury-related retirement may limit retired jockeys physical activity in everyday life, work and leisure following retirement. Ogilvie and Howe suggested that injuries may hamper athletes' ability to lead a productive and fulfilling life, because they cannot perform certain everyday functions of work and leisure. Furthermore, Gould, Bridges, Udry, and Beck (1997) suggested that, in the case of athletic injury, stress associated with athletes' limitations to physical activity may carry over to affect general self-esteem, emotions, relationships with others, and non-sport roles.

### *Mental Health Issues*

As indicated in the present study, Speed et al. (2001) also reported that many jockeys experience psychological problems following retirement. Speed et al. also stated that emotional distress, severe mood disturbance, despair, loss of self-confidence, and anxiety were all problems related to retirement from riding. According to Speed et al., emotional distress experienced by retired jockeys may be associated with a loss of identity and lowered self-esteem. McPherson (1980) and Brewer (1993) suggested that some athletes have an identity that is composed almost exclusively of their sports involvement. Results similar to those in the present study were found by Smith et al.

(1990), who reported that athletes with strong athletic identities are often more vulnerable to feelings of emotional distress, anxiety, depression, or hopelessness than athletes whose athletic identity is less strong.

### *Social Issues*

In this study, I identified problems some retired jockeys experienced in developing interests outside the racing industry, due to a lack of opportunity during their riding career. A jockey's hectic lifestyle, limited education, narrow skill set, and paucity of life experiences outside the racing industry could partly account for this difficulty. Koukouris (1994), Blinde and Greendorfer (1985), and Coakley (1983) supported this view of athletes' limited social experience in reporting that athletes with limited employment skills, material resources, or social contacts tended to experience greater adjustment difficulties. In accordance with these limitations, Speed et al. (2001) suggested that jockeys are often disconnected from their sporting relationships and society in general following retirement.

Thoits (1995) suggested that the onset of a relatively severe stressor (e.g., retirement) might create increased social dependency, resulting in the mobilisation of social resources. Furthermore, Rotella and Heyman (1993) suggested that, for elite sport performers, friendships are often based exclusively on the role of the athlete and that suddenly, these important social ties may be ruptured. Athletes, who are close to the end of their career, based on the typical age of retirement in their sport, may no longer define themselves merely by their sporting ability or achievements, except perhaps in their past glory. In the present study, it would seem that support from old racing friends and new social contacts was not common amongst retired jockeys, with jockeys feeling a sense of

isolation and being cut off from their ex-colleagues and old racing friends. This is perhaps emphasised in the racing industry due to the restricted lifestyle of horse racing jockeys.

### *Voluntary and Involuntary Retired Jockeys*

#### *Physical Health Issues*

The present study identified that involuntarily retired Victorian jockeys experienced greater physical health problems than voluntarily retired jockeys, particularly, back, arthritis, and joint problems. Alfermann and Gross (1998), investigated differences in career termination of 90 former elite-level athletes, representing 20 different sports in Germany. They found that athletes who retired involuntarily more often mentioned physical health problems than voluntarily retired athletes. Furthermore, in a study of ninety-one high school, college, and professional voluntarily and involuntarily retired athletes, Webb et al. (1998), found that injury-related retirees have the most difficult adjustment, due to the unexpected nature of injuries and the way they preclude opportunities for the athlete to prepare for retirement. This was also found by Fortunato (1997), in a study of Australian rules footballers. Fortunato's in-depth interviews revealed that footballers whose careers were terminated due to injury had difficulty overcoming thoughts of lost opportunity. Few studies, however, have examined the physical health adjustment of voluntarily and involuntarily retired athletes.

*Mental Health Issues*

This study supports a finding by Avery and Jablin (1998), suggesting that athletes who retire due to injury are at higher risk of experiencing psychological difficulties following retirement than those who retire voluntarily. According to Rotella and Heyman (1993), following involuntary retirement (e.g., career-ending injury) emotional and irrational thinking often become dominant. Similarly, Smith et al., (1990) also found that seriously injured American athletes experienced significantly more tension, depression, and anger and showed less vigour than those who retire voluntarily. Furthermore, research by Alfermann, Stambulova, & Zemaityte, (2004), suggested that individually retired athletes reported more negative emotions than did voluntarily retired athletes.

The results of the present study show that personal distress experienced by retired jockeys may be associated with a loss of self-identity and lowered self-esteem. In a study of involuntarily retired athletes in the America, Brewer, Van Raalte and Linder (1993) also found that athletic identity was positively associated with depressive reactions to sport injury. Furthermore, according to Blinde and Greendorfer (1985), athletes' ability to assume other roles is often severely inhibited following injury and, which leads to forced retirement. This is likely to be because they have not had many opportunities to expose themselves to roles outside sport and as a consequence adopt a non-athletic identity.

*Social Issues*

Results of the present study indicate that involuntarily retired jockeys experienced more difficulties developing interests outside the racing industry and more

problems gaining opportunities to develop interests outside the racing industry than those who retired voluntarily. This is not surprising given the total social immersion in the sports world of horse racing that most jockeys had to adopt to survive. The sudden character of most involuntary retirement has been proposed to play a role here (Speed et al., 2001). When jockeys' careers end, they are immediately deprived of involvement in the social world in which they had been immersed as there is less opportunity to be involved in the horse racing industry (e.g., media roles, horse training). In other sports, however, athletes may have greater opportunities to remain involved in other capacities (e.g., coach, administrator, media). Ogilvie and Taylor (2001) reported that premature retirement from sport may limit opportunities the athlete has to develop other interests outside sport and impact on retired athletes' social support. According to Alfermann (2000), limited opportunities to develop social support may influence involuntary retired retirees who often report a higher need for social support than voluntarily retired athletes.

#### *Comparison of Adjustment by Duration of Retirement*

##### *Physical Health Issues*

This study indicates that there were fewer physical health problems experienced by those jockeys, who had been involuntarily retired between 10 and 20 years, than those involuntarily retired jockeys, who had been retired for less than 10 years, and those involuntarily retired jockeys, who had been retired for greater than 20 years, who experienced more back and joint problems. Ahlgren's (2000), studies have made observations about more recent retirees. Ahlgren (2000) in his study of former high

school football players in America, reported some interesting observations about more recent retirees. He found that that the football players experienced physical health difficulties during the 18 months immediately following career termination. Ahlgren's study, however, only examined the physical health adjustment of recent retirees. No previous research has explicitly compared physical health following retirement, over short, medium and long periods of time. In comparing the physical health adjustment to retirement of more recently and long-term retired athletes, underlying variations in sports, personal characteristics, cultures, and generations should be considered when drawing conclusions about differences for recent and long-term retirees. Variations in sports, including frequency and intensity of body contact, duration of competition, and weight restrictions are all likely to account for differences in physical health adjustment to retirement of those recently and long-term retired athletes. Furthermore, personal characteristics, such as intensity and duration of training and length of career, may be linked to differences in physical health adjustment to retirement between those recently retired and long-term retired athletes. Finally, differences in culture and generation may influence physical health adjustment to retirement of recently and long-term retired athletes, as different rules and regulations and training methods may add more or less stress on the body.

### *Mental Health Issues*

The present study shows that jockeys, who had been involuntarily retired for between 10 and 20 years, reported more problems with their self-identity after leaving the racing industry, stronger feelings and emotional distress, and lower general self-confidence than those jockeys, who had been retired for less than 10 years or greater

than 20 years. I also reported that, involuntarily retired jockeys, who had been retired for less than 10 years, reported more problems with an inability to cope than did the longer term retirees.

Researchers investigating adjustment to retirement from sport have often examined athletes who have recently retired. In a study examining the adjustment to retirement of 12 former collegiate athletes in North America Munroe and Albinson (1996) found that involuntarily retired athletes experienced problems with mental health within one week of retiring, as well as four months after retirement. A few studies have also examined retirement over the longer term. In a retrospective study, Kleiber and Brock (1992) examined the process of athletic retirement of elite collegiate athletes. They found that involuntary retirement was related to lower life satisfaction and low self-esteem 5 to 10 years after retirement. When examining and comparing research of the mental health of long-term retirees with recent retirees, differences in sports, personal characteristics, and cultures should be taken into account. Similar to research into the physical adjustment to retirement of involuntarily retired athletes, no researchers have explicitly examined time since retirement in relation to the mental health of involuntarily retirees, comparing experiences for categories over such a long period of time.

### *Social Issues*

Jockeys, who had been involuntarily retired for between 10 and 20 years, reported lower levels of self-confidence than those jockeys, who had recently retired or retired for an extended period of time. Also, jockeys, who had been involuntarily retired

for greater than 20 years, experienced more problems with low motivation than those whose retirement was more recent.

This study shows that jockeys, who had been involuntarily retired for less than 10 years, experienced more family-related problems than the longer-term retired jockeys, including developing and maintaining family relationships, responsibilities, and time commitments. In a study of adjustment to retirement of professional footballers, McNally, Cavib-Stice, and Knoth (1992) found that recently retired players, who had strong familial support, experienced lower levels of social adjustment difficulties than footballers who had little social support from their family. It should be noted that professional footballers, along with athletes in most sports, do not spend the majority of their competitive career away from their spouses and children.

Although there has been no research examining the social issues involved in the adjustment to retirement of athletes over such a long period as completed in the present study, Ogilvie and Howe (1986) and Werthner and Orlick (1986) suggested that the type of retirement, voluntary or involuntary retirement, has an influence on social adjustment to retirement. Both studies found that involuntarily retired athletes are likely to require greater social support from friends and family than voluntarily retired athletes. Werthner and Orlick (1986), thus suggested that involuntarily retired athletes are likely to be condemned to a difficult social adjustment and, presumably, adjustment problems that last longer. In a study of former American professional baseball players, who had been retired between one month and three years, Rosenberg (1981d) found that social adjustment was a major component of successful adjustment to retirement. In both studies, however, there was no examination of the social adjustment of long-term retired athletes. In order to make comparisons between experiences of short-term and long-term

retirees, longitudinal or retrospective studies need to be conducted across different sports and cultures, also examining a range of personal characteristics.

As indicated in the present study, former jockeys experience a number of different social adjustment issues over the duration of their retirement. In accordance with disengagement theory, results of the present study show that disengagement did occur often, given that retirement was frequently forced upon jockeys, and that social adjustment problems, such as loss of contact with the racing industry and not adapting well socially outside the racing industry, occurred amongst involuntarily retired jockeys. Perhaps this highlights a critical issue in long-term adjustment to retirement from sport that research has not addressed to date. Because retirement from sport often occurs when athletes are relatively young, researchers need to examine long-term effects associated with efforts of retirees to engage in different occupational and social spheres away from the sport the athletes have left. Coping with disengagement from sport is a challenge for many retired athletes, but engaging in alternative activities is likely to be equally crucial to long-term adjustment. Thus, activity theory also appears to be relevant when studying the effect of involuntarily retired jockeys, as many retirees found it difficult to sustain a meaningful level of activity in their lives following retirement. A number of social adjustment issues (e.g., loss of contact with the racing industry, lack of opportunities within the racing industry, lack of training and skill development in areas outside of racing) did not assist involuntarily retired jockeys in maintaining levels of activity that were similar to those they experienced whilst racing. Furthermore, in accordance with previous research on continuity theory, there was a noteworthy absence of continuity in the lives of many of the former jockeys, who participated in this study. Long-term adjustment problems of involuntarily retired jockeys would suggest that some jockeys

might have benefited from other racing-related roles, such as trainer, steward, or commentator. Results from this study also show that a complete break from the racing industry following involuntary retirement is often traumatic and mental and social adjustment problems are ongoing throughout the duration of retirement. Strategies based on social breakdown theory may also be useful in the future, addressing the potential for minimisation of social breakdowns to smooth out the transition period, leading to a reduction in adjustment problems throughout the duration of retirement. These propositions, based on social gerontological theories, warrant examination by future researchers.

Kubler-Ross's (1969) thanatological theory of death and dying can also be related to the results of the present study. There was certainly evidence in the ratings made by retirees from horseracing that they felt strong emotional feelings associated with their retirement experiences, and with life after retirement (see Table 4.6). The ratings, although they do not directly monitor depression, do suggest that these former jockeys did experience periods when they felt depressed, over substantial parts of their retirement. The measures did not highlight issues of denial and bargaining, but these are worthy of study in future research, given the problems that participants in the present study had in adjusting to retirement from their sport. The signs, from the ratings on psychosocial issues, are that full acceptance had not been achieved by most of these retired jockeys. Thus, the application of strategies to help these retirees move beyond earlier, more damaging, stages that can persist for many years would be a valuable direction for research and practice.

It is important that researchers examine the findings from their research about retirement from sport in terms of theories, such as gerontological models of aging,

thanatological models of death and dying, and models of human adaptation. Other variables that may have a bearing on the relationship between retirement from sport and these theories include the nature of retirement, the sport, the culture, and the country in which the study is conducted. In addition, it is important that such research is conducted using standard research designs and measures to permit comparison across studies. It must also be noted that this study was cross-sectional, thus so comparisons between various retirement durations do not take into account the possibility that those jockeys who had been retired longer experienced more traumatic transitions at retirement and subsequently may have adjusted substantially. To understand the progression of adjustment during retirement from sport more completely, there is a need for longitudinal research to be conducted. Overall, the findings of this study provide evidence that can be interpreted within a number of theoretical frameworks and the findings suggest that several approaches contribute insights to our understanding of retirement from sport.

#### Methodological Issues

This section acknowledges the key methodological issues that emerged from the quantitative analysis of the adjustment experiences of retired jockeys, voluntarily and involuntarily retired jockeys, and involuntarily retired jockeys who had been retired for different lengths of time.

#### *Participants*

A limitation in this study was the low response rate (26%) and there are several reasons for this. First, jockeys may have been disinterested in the research. Second,

jockeys may not have wished to share their experiences in regard to certain topics in the questionnaire, because the retirement experience was traumatic and they did not want to recall those experiences. Third, jockeys from this study were all based within the state of Victoria and results may be different for jockeys from other states or countries. Further, even though confidentiality and anonymity were assured, some jockeys may also have been wary of the research, given that it was associated with Racing Victoria and the Victorian Jockeys' Association. Another limitation to the study could be the types of responses received. There may have been a response bias, in that jockeys who have bitter feelings towards the racing industry may have used the study as an outlet for their emotions. Similarly a sample bias may have occurred due to the small number of voluntarily retired jockeys in the sample. This would suggest that the study is not a true representation of the proportions of voluntarily and involuntarily retired jockeys throughout the retired jockey population. It is possible, however, that voluntarily retired jockeys felt that they had adjusted well and did not have much to share, so they did not return the questionnaire.

### *Procedure*

Despite having access to the entire population of retired jockeys residing in Victoria, only a small sample of jockeys was recruited. One reason for the small sample could be the manner in which the participants were recruited. Potential participants received an initial letter and reminders from the Victoria University research team, without written support from the VJA, although the questionnaires were circulated by the VJA, to keep the researchers distant during recruitment. Without formal promotion from the VJA, jockeys may have had low motivated to respond to the questionnaire.

### *Analysis*

The analysis techniques used to examine the patterns of retirement experiences of former jockeys were generally appropriate. Although the results for the ANOVA comparison between the three duration of retirement categories were interesting, it is possible that a correlational technique, such as multiple regression would have shown stronger effects. Multiple regression is a more sensitive technique for comparing variables that are continuous. It may have been more appropriate as an alternative to an ANOVA comparison that is less sensitive. This is because ANOVA groups continuous data, such as years since retirement, into discrete categories, often putting people with little difference in the different categories (e.g., jockeys retired 19 and 21 years), while putting in the same category people who have big differences on the variable of interest (e.g., jockeys retired for 21 years and 40 years). Nonetheless, the ANOVA did highlight some patterns of difference related to duration of retirement.

### Future Research

The results of the present study show that quality of life and life satisfaction of retired Victorian horseracing jockeys are relatively low. Quality of life and life satisfaction should in future be assessed by multidimensional and well-established measures. Formal measures of quality of life, such as the SF 36 (Cattell, 1966), and of well-being, such as the Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1971) or the Positive Affect and Negative Affect Scales (PANAS; Watson, Clark, & Tellegen, 1988) should be employed in future studies. Results of the present study also

show that athletic identity was low. Future research could also involve the use of other measures of retirement, such as measures of athletic identity.

In the present study, the results are similar, in many ways, to those of research in other sports. At the same time, the results of the present study indicated that the life of a jockey is more intense than that in most sports. For example, jockeys have a higher frequency of competition and a longer season than almost any other sport. Thus, it would be useful to examine the relationship between the intensity of the activity, athletic identity, and trauma or adjustment difficulties at retirement. Problems associated with retirement could also be examined in more depth within racing by obtaining details of each jockey's professional life and categorising jockeys as "intense" or "non-intense". The intense life of many jockeys is one of constant pressured activity (e.g., heavy training schedule, daily race meetings, numerous family obligations, and little opportunity to develop personally or professionally). A non-intense life has fewer work obligations, allowing more time and attention to be focused on personal and professional development, as well as on developing relationships with spouse and children, and with social groups outside racing. Intensity level could then be correlated with adjustment at or beyond retirement. Another aspect of this would be to compare intensity of involvement with duration of adjustment problems. Further insights into problems associated with retirement could be obtained by comparing adjustment to retirement of voluntary and involuntary retirees across sports. To better understand the effects of retirement over time, adjustment to retirement experiences of voluntarily and involuntarily retired athletes from different sports need to be compared. Furthermore, it would be useful to examine the relationship of length of career with duration of adjustment problems post career.

According to Speed et al. (2001), very few jockeys indicated an awareness of any support services that are currently available for retired jockeys, including the career planning, financial, and personal counselling services that are provided by Racing Victoria. In support of a recommendation by Speed et al., future research should examine the effectiveness of the full range of support services and training programs that are available to retired jockeys over the length of their lifetime, in Australia and internationally, and how current and retired jockeys can access these programs.

Jockeys in all three retirement duration categories experienced social problems following retirement. These findings were based on quantitative research. Qualitative research is required to enhance the understanding of what underlies some of these patterns. The types of qualitative research could involve interviews, life histories, or case studies across a range of variables.

Although the results of comparisons between jockeys, who had been retired for different durations, showed that the focus of adjustment problems changes over time, but can persist for many years, claims about the progression of adjustment are tentative, based on the current design. Research is needed that follows individual retirees, from the pre-retirement period, through several years of retirement at least. Such in depth, longitudinal research is challenging to conduct. Furthermore, retrospective studies and longitudinal, prospective studies are needed to investigate the adequacy of existing support systems for elite athletes across various sports. Also, research into current life skills intervention programs specific to racing and the benefits of counselling for retired horse racing jockeys is essential to further assist successful transition to post-riding careers. Future research on individual and group intervention strategies aimed at promoting effective career transition following retirement, such as cognitive and group

therapy would also be appropriate for a range of elite amateur, collegiate, and professional athletes. Researchers could also investigate the effectiveness of intervention strategies aimed at an organisational level, such as those programs aimed at assisting athletes with the transferability of skills from sport to a new career (Reece, Wilder, & Mahanes, 1996), those providing advice about financial support, and those assisting in clarifying values and goals of the retiring athlete (Sinclair & Orlick, 1993).

### Implications for Practice

This research provides jockeys, their families, and their colleagues with knowledge that has the potential to lead to enhanced preparation of jockeys for adjustment to retirement, through better planning for their post-athletic careers. Furthermore, this research provides sporting bodies and other support services, like sport psychology counselling, with information that may enhance retirement and career transition programs. The retirement experiences of jockeys in this study shows that jockeys and the appropriate racing associations are responsible for the development, implementation, and review of innovative strategies in an effort to better prepare current and future jockeys for retirement. Hopefully, research should prompt athletes still participating in sport, in particular those in professional horse racing, to consider retirement issues, engage in pre-retirement planning, and improve their own chances for a smooth career adjustment. At a more general level, this research provides insights that can help athletes to develop or seek out resources to facilitate adjustment to retirement.

Helping athletes to make a successful transition to post-athletic careers is an important responsibility of the sport psychology practitioner (Grove, Lavalley, Gordon & Harvey, 1998; Murphy, 1995), the athlete, and the governing body of the sport(s)

involved. In response to a suggestion by Grove et al. (1998) that increased attention should be directed towards methods for helping practitioners and athletes understand the retirement process, this research provides practical implications for counselling athletes with evidence of considerations in the retirement experience, such as, physical health, mental health, and athletes' adaptive (e.g., social engagement, adoption of other interests) and/or non-adaptive (e.g., isolation) behaviours throughout the retirement experience.

For some retired jockeys, retirement from riding had, at times, been a stressful period of their life, characterised by poor physical health, emotional distress, and/or problems with social support. Unless these findings are recognised by the racing industry, and the Victorian Jockeys Association, and essential resources are dedicated to retired jockeys, it is likely that retired jockeys will continue to experience poor physical, mental, and social adjustment to retirement in the future. Furthermore, according Speed et al. (2001), retired jockeys reported a lack of support services, including sport psychology practitioners. This suggests that there is little chance that current or retired jockeys are prepared or assisted by experts in the process of adjustment to retirement from riding. There is a clear need for more information to be provided to jockeys about the resources that are available, as well as a necessity for the relevant organisations to develop additional resources.

Based on the findings of this study and the larger study (Speed et al., 2001) I would hope that the racing industry begins to prepare all jockeys for adjustment to retirement from early in their career. Furthermore, this research should assist sport psychology practitioners in being aware of factors to consider in voluntary and

involuntary retirees, including, physical health and mental health issues, and athletes' adaptive and/or non-adaptive behaviours.

Involuntarily retired jockeys, who had been retired for less than 10 years or greater than 20 years, experienced the greatest physical health adjustment difficulties following retirement. The racing industry should, provide services during a jockeys career and soon after retirement to alleviate long-term physical problems. Furthermore, the racing industry should also introduce rehabilitation programs for those jockeys who retire due to injury in order to alleviate ongoing health problems.

Findings of this study indicate that the racing industry should provide jockeys with a better post-career support system. This would include providing current jockeys with the opportunity to develop other non-racing related skills and social networks outside the racing industry. This would assist jockeys to develop an identity not totally linked to their athlete status, but instead, would encompass other interests/hobbies, family, and friends. An appropriate support system is also likely to change attitudes and behaviour of jockeys towards personal development and assist in educating support networks of jockeys. This support would ensure a smoother adjustment to retirement for retired jockeys, enhancing the self-identity and self-confidence of involuntarily retired jockeys, who are less likely to have planned their retirement than voluntary retirement (e.g., Allison & Meyer, 1988; Kleiber & Brock, 1992; Fortunato, Anderson, Morris, & Seedsman, 1995; Lavalley, Grove & Gordon, 1997; Werthner & Orlick, 1986; Wylleman, 2001). Sport psychology practitioners would be a valuable inclusion in this retirement process, ensuring that each jockey has an appropriate and specific developmental plan and coping resources available for assistance in adjustment to life following retirement from riding.

Finally, this study suggested that jockeys, who had been involuntarily retired for less than 10 years, experienced more concern with social issues, particularly family-related problems, including developing and maintaining family relationships, responsibilities, and time commitments, than those jockeys who had been retired for more than 10 years. Once again, I propose, along with Speed et al. (2001), that the racing industry has a responsibility with reference to this issue. The racing industry should establish working restrictions based on Occupational Health and Safety standards (OHS) for currently employed jockeys in an attempt to equate time and responsibilities at work, with time and responsibilities at home, with family and friends. For example, a policy could be introduced that stipulates maximum working hours per day/week. Such policies, however, would be difficult to monitor and control. Furthermore, rather than imposing an external control on jockeys, it would be preferable if jockeys were educated to use techniques such as self-reliance and self-control to create their own balance and monitor it. This would assist jockeys, when they retire involuntarily, with social adjustment to retirement, because they would have more opportunities to develop family relationships, understand their responsibilities within the family, and learn to manage time more effectively. In addition, once jockeys retire, sport psychologists could play a major support role in assisting them to manage their daily family responsibilities and commitments.

### Conclusion

Although more research is needed, the data that was examined shows that the experience of retirement from sport, in this case horse racing, is a difficult transition for most jockeys. This is particularly true for those jockeys who retired involuntarily, who

reported that they experienced greater physical, mental, and social problems than voluntary retirees. In addition, involuntarily retired athletes, who had been retired for less than 10 years or greater than 20 years, experienced greater physical health and social problems than those who had been retired for 10-20 years,, whilst those jockeys who had been retired between 10 and 20 years, reported greater adjustment difficulty in regard to mental health problems. This is an unexpected finding, that should be examined further, because of its implications for action to support jockeys, who have been retired for different durations.

Further study in this area would be valuable in assisting the welfare and life balance of retired jockeys. Examination of suitable training, education, and support services will provide retired and current jockeys with opportunities for the development of career options outside their particular industry programs and for opportunities to learn how to balance work, personal, family and, social commitments. Further study will also provide current and retired jockeys with information and advice on the assistance provided by their sporting associations that may assist them in order for them to be prepared for retirement and to cope after they retire. Research in this area could also identify the most effective programs and assess how particular sporting associations provide retired and current jockeys with opportunities for employment in non-industry positions and opportunities to socialise with people inside and outside their industry. Although the case of horse racing jockeys might be an extreme example of retirement adjustment, because of the intensity of typical riding careers, many of the patterns observed in the present study could occur in other sports. Thus, I hope that the present research will stimulate other researchers to examine the retirement issues in this thesis, in horse racing and in all sports.

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## APPENDICES

*Appendix A***Victoria University of Technology**

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**PLAIN LANGUAGE STATEMENT****Adjustment and Quality of Life of Retired Jockeys**

As the demands associated with competitive sport have increased over time, so too has the academic interest in athlete career transition and adjustment to retirement from sport. Until recently, however, there has been little research in the area of jockey retirement and the retirement adjustment process. The adjustment to retirement may be emotional, psychological, social, financial, or a combination of these factors, and differ for those who retire voluntarily and those who do not.

Retirement is a normal process in elite sport participation and may come at any time. Retirement, however, can be extremely hard to handle for those who have it forced upon them due to career ending injury. This study will provide important information about the retirement experiences of a population of elite athletes who have in the past received little investigation – that of professional jockeys in the horse racing industry.

I wish to invite you to participate in our investigation of the quality of life and adjustment of retired jockeys. The key focus of this study is to explore the comparison of quality of life for those jockeys who have retired due to catastrophic injury and those who retired for reasons other than career ending injury (weight restrictions, lack of rides and voluntary retirement). Your participation will involve the completion of a questionnaire that will take approximately 30 minutes. The questionnaire asks participants to provide information about their experiences following retirement. The information you provide will be invaluable in assisting former athletes to cope with the retirement process and achieve a greater quality of life following retirement from their sporting career.

Please note that participation is entirely voluntary and you can withdraw at any time. No information gained from the questionnaire will enable you to be identified. All of the questionnaires will be kept confidential and stored securely in the office of Dr Harriet Speed at Victoria University. Please note that your return of this questionnaire to the researchers indicates consent to participate in the study.

I thank you in advance for assisting us in our research. Should you have any concerns or queries about the study, please do not hesitate to contact Dr Harriet Speed at the address below. If at any stage you have any concerns about the conduct of the study, please contact the University Human Research Ethics Committee, Victoria University, P.O. Box 14428 MCMC, Melbourne, 8001 (Ph 9688 4710).

Dr Harriet Speed  
Principal Investigator  
Victoria University  
Ph: (03) 9689 8637

Appendix B

**THE WELFARE OF RETIRED JOCKEYS QUESTIONNAIRE**

**PERSONAL DETAILS**

1. Age: \_\_\_\_\_ years                      2. Sex:  Male  Female

3. Education level:  year 8/9 High School     Year 10 High School     Year 11/12 High School  
 TAFE course                       Trade                       University Degree  
 Other, Please identify \_\_\_\_\_

4. Level of computer skills:  None                       Low                       Moderate                       High

5. Marital Status:  Single                       Married                       Divorced                       Widowed                       Other \_\_\_\_\_

6. Number of Children: \_\_\_\_\_

**RIDING CAREER**

7. Duration of riding career: \_\_\_\_\_ years

8. What was the highest level attained during your riding career:  
                                                                 

Number of winning rides at that level: \_\_\_\_\_

9. Did you ride mostly at:  country race meetings                       metropolitan race meetings

10. During your riding career, what do you consider were the most important reasons underlying why you were a jockey? Please rate the following reasons from 1 = *most important* to 5 = *least important*

financial rewards                       family connections                       lifestyle of jockeys \_\_\_\_\_  
 love of horses & riding                       public profile                       Other, please specify \_\_\_\_\_

**RETIREMENT FROM RIDING**

11. Retirement Status:  Occasionally ride .....How often \_\_\_\_\_  
 Retired  
 Other, please specify: \_\_\_\_\_

12. Years since retired from riding: \_\_\_\_\_ years

13. Reason(s) for retirement: (tick whichever applies)

Personal choice                       Too difficult controlling weight                       Financial reasons  
 Injuries                       Poor riding performances                       Other, please specify \_\_\_\_\_  
 Rides dried up                       Lack of motivation                      \_\_\_\_\_

Any Comments?: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**VICTORIAN JOCKEYS' ASSOCIATION (VJA)**

14. Were you a member of the VJA during your riding career?  Yes  No

15. Are you a member of the VJA now?  Yes  No

**PERSONAL SITUATION SINCE RETIRING FROM RIDING**

16. Since retiring, has your employment history been:  have not had employment  
 sporadic  
 continuous in one or few jobs (less than 5)  
 continuous and in 5 or more jobs

17. Have you been employed by the racing industry in a non-riding position since retiring from racing?

No  Yes, please indicate nature of job \_\_\_\_\_

18. Are you currently employed?  No  Yes .....  Full-time  
 Part-time

If employed, type of employment: \_\_\_\_\_

19. Current level of gross annual income:  less than \$10,000  \$50,000 - \$59,000  
 \$10,000 - \$19,000  \$60,000 - \$69,000  
 \$20,000 - \$29,000  \$70,000 - \$79,000  
 \$30,000 - \$39,000  \$80,000 - \$99,000  
 \$40,000 - \$49,000  \$100,000 or more

20. Estimated current value of assets:  \$0 - \$49,000  
 \$50,000 - \$99,000  
 \$100,000 - \$249,000  
 \$250,000 - \$499,000  
 \$500,000 or more

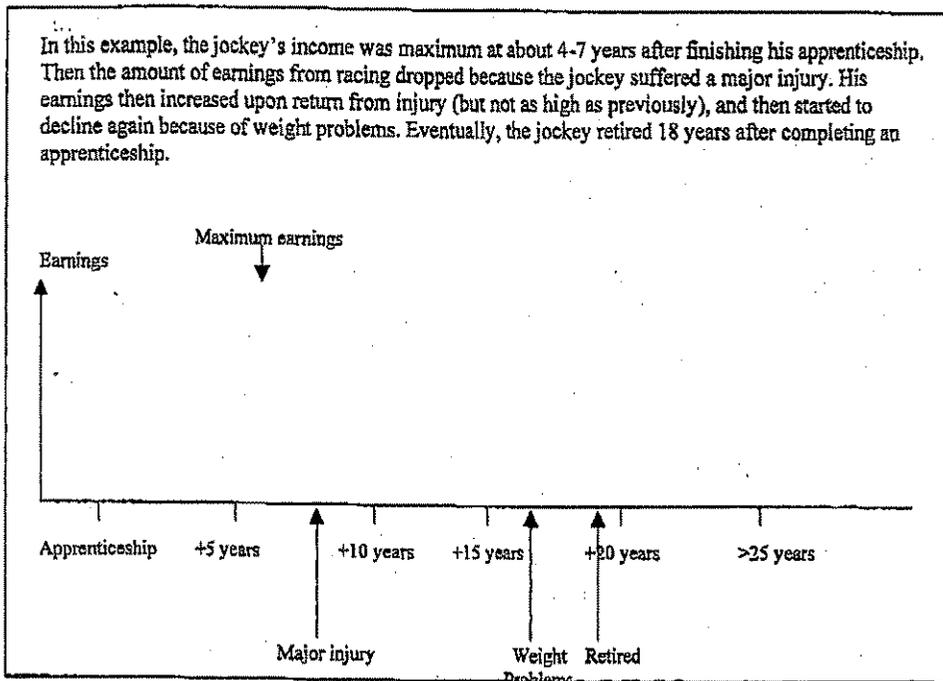
21. Do you currently, or have you in the past, received payments or benefits from any of the following sources:

	Currently receive	Have received in the past
Superannuation payments	<input type="checkbox"/>	<input type="checkbox"/>
VRC Benevolent Fund	<input type="checkbox"/>	<input type="checkbox"/>
WorkCover	<input type="checkbox"/>	<input type="checkbox"/>
Sickness/disability benefits	<input type="checkbox"/>	<input type="checkbox"/>
Age Pension	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>



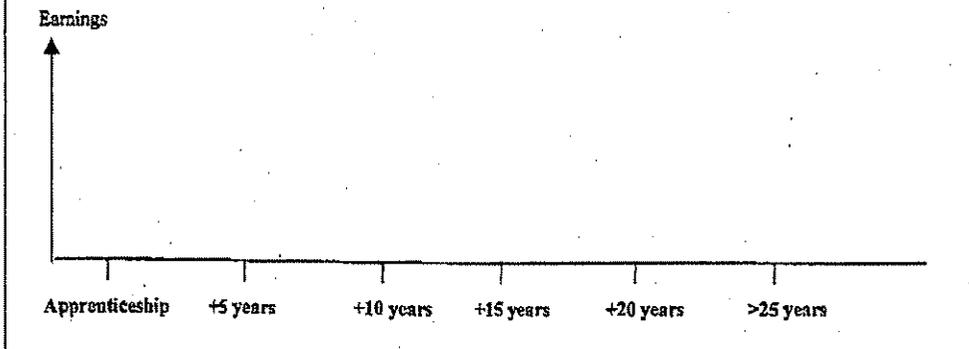
**Earnings Profile During Racing Career**

23. Please indicate the way in which your earnings from racing were distributed over your riding career. An example of how to do this is provided below.



**Your Earnings Profile**

Using the example above as a guide, please draw your own Earnings Profile in the space below. Please include details of any significant events that occurred during your riding career that effected your earnings (e.g. injury, weight problems, etc.) as shown above.



**RETIREMENT EXPERIENCES**

24. Please indicate the extent to which each of the areas listed below have been problem areas at some time since you retired from riding? Please comment on any issues if you wish.

Response codes:    1                    2                    3                    4                    5  
                          not at all        rarely            sometimes        often            very much  
                          a problem        a problem        a problem        a problem        a problem

(circle response)		
Retirement Issues	Response	Any Comments?
<b>Employment opportunities</b> <ul style="list-style-type: none"> <li>• limited knowledge of job opportunities</li> <li>• limited knowledge of job processes (e.g. preparing resumes, job interviews)</li> <li>• limited prior employment experience</li> <li>• low self-confidence related to finding a job</li> <li>• low motivation for job hunting</li> </ul>	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	
<b>Education opportunities</b> <ul style="list-style-type: none"> <li>• lack of prior formal education</li> <li>• limited knowledge of educational courses</li> <li>• limited knowledge of how to apply for TAFE, University or other educational courses</li> <li>• low confidence in own abilities</li> </ul>	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	
<b>Weight management</b> <ul style="list-style-type: none"> <li>• excessive weight gain</li> <li>• low motivation to look after weight</li> <li>• continuation of weight-loss methods started when riding</li> </ul>	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	
<b>Substance abuse</b> <ul style="list-style-type: none"> <li>• alcohol _____</li> <li>• weight control drugs/medications</li> <li>• other, _____</li> </ul> <p style="text-align: center;">(optional)</p>	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	
<b>Social support from</b> <ul style="list-style-type: none"> <li>• friends</li> <li>• family</li> <li>• other jockeys</li> <li>• racing industry, generally</li> </ul>	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	
<b>Emotional distress</b> <ul style="list-style-type: none"> <li>• inability to cope</li> <li>• strong emotional feelings (e.g. anger, despair)</li> <li>• low general self-confidence</li> <li>• gambling issues</li> <li>• other _____</li> </ul> <p style="text-align: center;">(optional)</p>	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	
<b>Family-related issues</b> <ul style="list-style-type: none"> <li>• relationships</li> <li>• time commitments</li> <li>• family responsibilities</li> </ul>	1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	

Response codes: 1            2            3            4            5             
 not at all      rarely      sometimes      often      very much  
 a problem      a problem      a problem      a problem      a problem

Retirement Issues	Response	Any Comments?
<b>Social interactions</b>		
• social isolation	1 2 3 4 5	
• difficulties developing new social contacts outside of racing	1 2 3 4 5	
• losing contact with friends from racing	1 2 3 4 5	
<b>Developing an identity outside of racing</b>		
• lack of opportunities	1 2 3 4 5	
• low self-confidence	1 2 3 4 5	
• difficulties leaving racing industry	1 2 3 4 5	
<b>Developing interests (other sports, hobbies, business interests) outside of racing</b>		
• lack of opportunities	1 2 3 4 5	
• low self-confidence	1 2 3 4 5	
• low motivation	1 2 3 4 5	

25. Please indicate the extent to which you have suffered from or have been susceptible to each of the health issues listed below since you retired from riding? Please comment on any issues if you wish.

Response codes: 1            2            3            4            5             
 not at all      rarely      sometimes      often      very frequently

Health Issues	Response	Any Comments?
<b>Functional health:</b>		
• Liver problems	1 2 3 4 5	
• Kidney problems	1 2 3 4 5	
• Immune system problems	1 2 3 4 5	
• Arthritis	1 2 3 4 5	
<b>Structural health:</b>		
• Back problems	1 2 3 4 5	
• Hip problems	1 2 3 4 5	
• Other joint problems	1 2 3 4 5	
• Osteoporosis	1 2 3 4 5	
• Dental problems	1 2 3 4 5	
<b>Weight management:</b>		
• Excessive weight gain	1 2 3 4 5	
• Use for laxatives, diuretics or medication /drugs for continued weight control	1 2 3 4 5	
• Use of vomiting to continue weight control	1 2 3 4 5	
<b>Other health problems (please specify):</b>		
•	1 2 3 4 5	
•	1 2 3 4 5	
•	1 2 3 4 5	
•	1 2 3 4 5	

26. Are there any other problem areas relating to such aspects as your financial situation, health, developing a life outside of racing etc, that you have experienced during retirement?

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**PART 4: SUPPORT AND PLANNING**

27. What have been the most important factors in any successes that you have had in the following areas of your life since retiring from riding? Examples might include such factors as: family support, seeking professional advice, good planning prior to retirement

Life Areas	Factors	Any Comments?
Financial Management		
Employment		
Education		
Weight Management		
Physical Health		
Mental Health (e.g. ability to cope, confidence)		
Family Relations		
Social Interactions		
Developing an identity outside of racing		
Developing interests outside of racing		

28. Did you receive any support or guidance from the racing industry or elsewhere for any of the issues listed below to assist you in your retirement from riding? How helpful to you was that guidance/support?

Response codes:      1                      2                      3                      4                      5  
                                  not at all            a little            moderately        a lot                very  
                                  helpful               helpful               helpful               helpful               helpful

Retirement Issues please tick each one where support was received	Who provided support? (e.g. private counsellor, friend, VRC)	How helpful?
<input type="checkbox"/> Financial management		1 2 3 4 5
<input type="checkbox"/> Employment		1 2 3 4 5
<input type="checkbox"/> Education		1 2 3 4 5
<input type="checkbox"/> Weight management		1 2 3 4 5
<input type="checkbox"/> Substance Abuse		1 2 3 4 5
<input type="checkbox"/> Physical health		1 2 3 4 5
<input type="checkbox"/> Mental health		1 2 3 4 5
<input type="checkbox"/> Spirituality (religious or non-religious)		1 2 3 4 5
<input type="checkbox"/> Relationships		1 2 3 4 5
<input type="checkbox"/> Developing interests outside of racing		1 2 3 4 5

29. Are you aware of any retirement support services (you do not need to have used them) that are provided to retired jockeys by the racing industry? For example: Racing Victoria's training programs, VRC Benevolent Fund, VIA services.

YES                       NO

30. What is the nature of the service(s) provided? And who provides them?

Nature of Service	Who provides the service?	Would you use the service in the future?	Any Comments?
1.		<input type="checkbox"/> No <input type="checkbox"/> Maybe <input type="checkbox"/> Yes	
2.		<input type="checkbox"/> No <input type="checkbox"/> Maybe <input type="checkbox"/> Yes	
3.		<input type="checkbox"/> No <input type="checkbox"/> Maybe <input type="checkbox"/> Yes	
4.		<input type="checkbox"/> No <input type="checkbox"/> Maybe <input type="checkbox"/> Yes	

31. Please indicate the extent to which you agree that the actions listed below will help jockeys prepare for, or cope with, retirement from riding. Please comment on any issue if you wish.

Response codes:      1                      2                      3                      4                      5  
                                  strongly                      disagree                      neither disagree                      agree                      strongly  
                                  disagree                                           nor agree                                                                disagree                                           agree

Statement	Response	Any Comments?
A compulsory superannuation scheme run by the racing industry	1 2 3 4 5	
A voluntary superannuation scheme run by the racing industry	1 2 3 4 5	
Further educational opportunities during the apprenticeship period	1 2 3 4 5	
Professional financial guidance: <ul style="list-style-type: none"> <li>• during riding career</li> <li>• after riding career</li> </ul>	1 2 3 4 5 1 2 3 4 5	
Career planning (i.e. examining career interests and necessary skills); <ul style="list-style-type: none"> <li>• during riding career</li> <li>• after riding career</li> </ul>	1 2 3 4 5 1 2 3 4 5	
Skills training (e.g. computer skills, specific skills needed for certain jobs); <ul style="list-style-type: none"> <li>• during riding career</li> <li>• after riding career</li> </ul>	1 2 3 4 5 1 2 3 4 5	
The racing industry providing job and career opportunities within the industry	1 2 3 4 5	
The development of a program that offers support services and informal social opportunities for retired jockeys	1 2 3 4 5	
Recognition (e.g. life membership) for jockeys' contribution to the racing industry when they retire	1 2 3 4 5	
Other, please specify: <hr/>	1 2 3 4 5	
—	1 2 3 4 5	
—	1 2 3 4 5	

**32. Overall, how satisfied are you with your achievements during your riding career?**  
(place a cross on the line).

1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_

very dissatisfied      dissatisfied      neither dissatisfied nor satisfied      satisfied      very satisfied

Any further comments? \_\_\_\_\_  
\_\_\_\_\_

**33. Overall, how satisfied are you with your life today?** (place a cross on the line).

1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_

very dissatisfied      dissatisfied      neither dissatisfied nor satisfied      satisfied      very satisfied

Any further comments? \_\_\_\_\_  
\_\_\_\_\_

**34. What do you think are the most important actions that the racing industry can take to assist jockeys prepare for, or cope with, retirement from riding?**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Thank you for your participation in this important research.**