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Title: Career intentions of Australian physical education teachers

Year: 2015

Version:

Please cite the original version:

Mäkelä, K. J. J., & Whipp, P. R. (2015). Career intentions of Australian physical education teachers. *European Physical Education Review*, 21(4), 504-520.
<https://doi.org/10.1177/1356336X15584088>

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1 Running head: PE TEACHERS CAREER INTENTIONS

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11 Career intentions of Australian physical education teachers

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14 **Abstract**

15 The purpose of this study was to investigate Australian physical education (PE) teachers'
16 career intentions and factors influencing their intentions. A sample ($N=234$) of Western
17 Australian PE teachers responded to a questionnaire determining PE teachers' work and the
18 primary motivators for intention to leave the profession.

19 Half (51.3%) of the respondents wanted a change from their current PE teacher job and
20 39.8% were intending to leave PE teaching. The most frequent reasons for wanting to leave
21 PE related to: non-use of expertise, workload, school administration, and lack of
22 opportunities for personal and professional development. Consideration should be given to
23 mediation strategies that serve to elevate physical educators' needs satisfaction for teaching
24 autonomy, competence and relatedness. Personal and professional advancement in schools
25 to help maintain all teachers, particularly experienced teachers appears warranted. PE
26 teachers' workload is considerable and worthy of review with the intention to extend their
27 *use-by-date* and retain their experience-enriched expertise.

28 *Keywords:* Attrition, area transfer, turnover, career trajectory, physical education

29

Introduction

30 Traditionally, it has been thought that teachers' careers begin in university with pre-
31 service teacher education and in-service teacher education that occurs in school where
32 teachers are socialised to the school system (Christensen & Fessler, 1992). However,
33 teachers' careers are formed from several different stages and teachers develop
34 individually. Teachers have different skills, attitudes, knowledge, and behaviors at various
35 stages during their work-life cycle (Woods & Lynn, 2001). Teachers' work-life cycle and
36 different stages of their career have been identified in many studies and there are several
37 models that describe different stages of teachers' careers (Day et al., 2006; Fessler &
38 Christensen, 1992; Huberman, 1989; Sikes, 1985). From these models, Fessler and
39 Christensen (1992), Huberman (1989) and Sikes (1985) have identified similar stages in a
40 teacher's career and it is these stages that frame this research in conjunction with the Basic
41 Satisfaction Needs Scale (Baard, Deci, & Ryan, 2004). Recently, Mäkelä (2014) have
42 modified this cycle to PE teachers. Even though there are similarities (e.g. all models
43 include reference to an induction stage and frustration stage) there are also differences in
44 these models (for example the number of stages vary).

45 **Teacher career cycle**

46 While teachers' individual career stages and their quality of work life can be impacted
47 by a range of variables (Steffy, Wolfe, Pasch, & Enz, 2000), a career begins with the
48 preparation stage undertaken in pre-service education (Christensen, 1992), with the next
49 stage involving induction (Letven, 1992) (Figure 1). During the induction stage, teachers'
50 work to gain acceptance from pupils, parents, colleagues and administration. Some teachers
51 may face a reality shock during this stage. They experience disillusionment between reality

52 and the ideals espoused in the teacher education programs (Letven, 1992). After the first
53 years of teaching, teachers are potentially seen to enter the commitment or competence
54 building stage. Teachers have generally built their competence, they have committed to
55 their work via additional responsibilities and they may stabilise their position in the school
56 (Burke & McDonnell, 1992a, 1992b). However, it must be kept in mind, that the teacher
57 career cycle is not a linear process. Teachers may progress differently and teachers do not
58 necessarily experience every stage of the model (Woods & Lynn, 2001).

59 FIGURE 1.

60 After the stabilisation stage of the profession, some have reported a frustration stage
61 (Price, 1992a) or the reassessment stage (Huberman, 1989). During this stage teachers'
62 question themselves and their choice of profession, feeling disenchantment and frustration
63 with teaching and seeking ways for expressing, fulfilling and satisfying oneself (Price,
64 1992a; Sikes, 1985). Teachers can feel locked into an unfulfilling profession without
65 possibilities for promotion and job satisfaction declines (Whipp, Tan, & Yeo, 2007). As a
66 consequence, stress increases and teachers may perceive a lack of support from community
67 and school administration (Huberman, 1989; Price, 1992a). Upon encountering the
68 frustration stage, employment options may be assessed and a departure from teaching
69 realised. After the frustration stage, teachers' careers stabilise. A common characteristic of
70 this stability (Price, 1992b) or serenity stage (Huberman, 1989) is that teachers are doing
71 their job well, but nothing more, they are no longer eagerly developing their professional
72 capacity (Price, 1992b). Worthy of note there are potentially teachers who avoid this and
73 continue to work as enthusiastic as earlier (Woods & Lynn, 2001). Teachers may have lost
74 their enthusiasm and energy, but they have a greater sense of confidence and self-

75 acceptance (Huberman, 1989). The final years of teachers' work-life includes preparing for
76 retirement, referred to as career wind-down or disengagement (Huberman, 1989) and career
77 exit (McDonnell & Burke, 1992b). Feelings may differ between positive and negative,
78 depending on whether teachers have had rewarding or unfulfilling professional experiences
79 (Day et al., 2006; McDonnell & Burke, 1992a; Sikes, 1985).

80 Work-related motivation, engagement and psychological adjustment are impacted by
81 one's satisfaction for the intrinsic needs of competence, autonomy and relatedness (Deci,
82 Ryan, Gagne, Leone, Usunov, & Kornazheva, 2001). By definition, the need for autonomy
83 represents one's desire for input, choice, and a sense of volition or the initiator of one's
84 pursuits (Baard, Deci, & Ryan, 2004). Competence reflects one's desire to feel capable
85 with respect to one's environment, succeeding at optimally challenging tasks, and
86 relatedness refers to the desire to feel understood, respected by, and connected to
87 significant others. An autonomy supportive work climate; which is highly influenced by
88 superiors, colleagues and stakeholders, facilitates needs satisfaction for these three basic
89 nutrients (Deci et al., 2001). Opportunities for an interpersonal climate can influence such
90 tasks as goal setting, decision making, and work planning. A worker's career satisfaction
91 and psychological well-being, as characterised by the various work-life cycle stages,
92 appears linked to work performance (Deci et al., 2001) and consequently career intention.

93 A teacher's career aspirations and decisions are dependent on a myriad of personal
94 and professional complexities (e.g., family, competence, colleagues, administration). When
95 encountering the various stages during their work-life cycle, the experience is both
96 contextual and individualised. Whilst some flourish, some stagnate, and others pursue a
97 transition to other teaching-related areas or alternate professions. Teachers' career

98 transitions are commonly called turnover and can be divided into three components: 1)
99 *attrition* means that teachers leave the profession (moves outside the teaching profession);
100 2) teacher *area transfer* refers to teachers changing their subject area; and 3) *migration*
101 refers to when teachers relocate from one school to another, but remain teaching the same
102 subject (Boe, 2007).

103 **PE teachers' job satisfaction and career intentions**

104 Even though teachers' careers are widely studied, there is little recent literature
105 related to PE teachers' **career intentions**. Most of the studies report qualitative research
106 (e.g., Armour & Jones, 1998; Moreira, Sparkes, & Fox, 1995; Woods & Lynn, 2001), but
107 there is a gap in recent research using quantitative methods. Some studies have concentrated
108 on the beginning of PE teachers' careers and identified the challenges of the first years of
109 teaching (Solomon, Terry, & Carter, 1993) while others have concentrated on the
110 experienced teacher and their career decisions (Macdonald, 1999; Whipp, et al., 2007).
111 According to Evans and Williams (1989) a high proportion of English male (80%) and
112 female (40%) PE teachers were looking for a career outside of PE teaching. It has been
113 reported that teachers who leave the profession do so usually before 5 years of service
114 (Huberman, 1989, Ingersoll, 2001), with one in six Australian teachers exiting in the first 2
115 years of employment (Martinez, 2004). This finding is consistent for PE teacher attrition
116 rates, with half (50%) of the graduates from an Australian University (1975–1993) leaving
117 PE teaching by 1994, and 25% doing so within 4 years of beginning teaching (Macdonald,
118 Hutchins, & Madden, 1994). In Finland, 23% of graduated PE teachers (1980-2006) had
119 left the PE teaching profession after a mean period of 9.0 years (SD=7.1 years), while 39%

120 of Finnish PE teachers were intending to change their profession (Mäkelä, Hirvensalo,
121 Laakso, & Whipp, 2014; Mäkelä, Hirvensalo, & Whipp, 2014).

122 In the PE teaching profession, there are multiple factors that facilitate job satisfaction;
123 however, working with young people is reported to be a one of the most significant
124 (Moreira, et al., 1995). On the other hand, there are aspects that lead to job dissatisfaction
125 and drive some teachers away from the PE teaching profession. Several studies have
126 reported that marginal status and lack of respect for PE are causing dissatisfaction (Curtner-
127 Smith, 2001; Henninger, 2007; Macdonald, 1995; Whipp et al., 2007). PE teachers are seen
128 to teach *lower down on the scale*, a non-academic subject or being just a sport teacher
129 (Kougioumtzis, Patriksson, & Stråhlman, 2011; Macdonald, 1999; Moreira et al., 1995;
130 Shoval, Erlich, & Fejgin, 2010). Moreover, isolation from colleagues or lack of collegiality
131 are familiar in PE because of working in different facilities and being distant to the
132 staffroom (Stroot, Faucette, & Schwager, 1993; Woods & Lynn, 2001). In response, early
133 career PE teachers report feelings of being *Robinson Crusoe*, alone on an island, where
134 nobody understands their language (Shoval et al., 2010). This lack of collaboration,
135 especially with PE colleagues, inhibits their ability to compare practises, ideas, and
136 experiences in PE (O'Sullivan, 2006). Lack of support from colleagues and administration
137 is closely linked to isolation and lower levels of motivation (Carson & Chase, 2009). PE
138 teachers have reported a lack of support because they are expected to solve problems
139 themselves without anyone to share their ideas and thoughts (Shoval et al., 2010). Support
140 from administration and colleagues could potentially increase PE teachers' quality of
141 worklife (Mäkelä, Hirvensalo, & Whipp 2014), perceptions of workplace relatedness

142 (Carson & Chase, 2009) and extend their self-percieved teaching *use-by-date* (Whipp et al.,
143 2007).

144 Another common concern among PE teachers is lack of resources, including
145 equipment or sufficient facilities for teaching (Evans & Williams, 1989; Kougioumtzis et
146 al., 2011; Smyth, 1995). When PE teachers have to work with minimal resources, this
147 serves to complicate the implementation of curriculum tasks (McCaughtry, Barnard, Matin,
148 Shen, & Kulinna, 2006), limits opportunities to offer quality PE for pupils (Armour &
149 Jones, 1998) and negatively impacts teachers' perceived competence and autonomy
150 (Carson & Chase, 2009).

151 A lack of planning time or high workload are common in PE (Whipp et al., 2007).
152 Teachers report an inability to deal with multiple demands (Shoval et al., 2010) and this
153 leads to a lack of energy to engage in creative thinking and to sustain high-level
154 achievement for students (Whipp et al., 2007). Also common in PE are problems with
155 student behavior, discipline and motivation (Shoval et al., 2010; Solomon et al., 1993),
156 which can lead to job dissatisfaction (Kulinna, Cothran, & Regualos, 2006).

157 Physical educators, in particular the experienced, have expressed dissatisfaction with
158 a lack of opportunities. They report poor promotional opportunities, as a consequence they
159 feel locked into the system (Armour & Jones, 1998; Moreira, Sparkes, & Fox, 1995; Whipp
160 et al., 2007). Also, PE teachers face problems and difficulties that *high status* subject
161 teachers do not. They also have fewer academic posts to apply for and opportunities to
162 display their competencies. Experienced PE teachers are also frustrated with a lack of
163 possibilities for professional development (Armour & Jones, 1998) or taking part in
164 educational debate or decision making (Macdonald, 1995; Whipp et al., 2007). PE teachers

165 have also reported a desire to better use their knowledge and skills (Mäkelä, Hirvensalo, &
166 Whipp 2014). PE teachers may also feel that they are lacking intellectual challenges
167 (Macdonald, 1995) and express concern for the repetitiveness of teaching PE (Lynn &
168 Woods, 2010). However, this issue is potentially not isolated to PE teachers, but also
169 reported to be problematic for other teachers (Froehlich, 2007).

170 Western Australian PE, at the time of data collection, under the jurisdiction of the
171 Curriculum Council, a body independent of the Government school authority, was
172 compulsory for all years of school including year 10. The existing outcomes-based
173 curriculum was framed by five overarching curriculum guidelines. First, within *knowledge*
174 *and understanding*, PE classes are expected to access health-promotion information,
175 relating physical activity, sports, diet, disease prevention, and the various factors that may
176 shape physical development. *Skills for physical activity* incorporate the provision of
177 fundamental movement skills of locomotion, body management, and object control in free
178 and structured settings, achieved through incremental skill practice using independent,
179 paired, and team-based activities. The third PE curriculum requirement is termed *self-*
180 *management skills*, and raise awareness of the consequences of one's actions, set effective
181 goals, manage stress, and understand appropriate physical activity levels. Fourth,
182 *interpersonal skills* focuses on the way in which PE classes should help develop
183 communication, cooperation, conflict resolution, and empathy through the adaption of roles
184 during class (e.g., participant, leader, player coach). Finally, *attitudes and values*, which
185 was not assessed, centers on recognising the value of hard work, physical activity, fair play,
186 teamwork, as well as social and moral responsibility, and respecting and including others. It
187 is noteworthy that the significant majority (80.7%) of a sample of Western Australian

210 To determine the career intentions of PE teachers, a parcel of five structured questionnaires
211 were mailed to the School Principal of 193 Western Australian secondary schools (98% of
212 the defined sample) with reply-paid envelopes, a letter of ethical approval from The
213 University of Western Australia and where appropriate another signed letter of approval
214 from the Western Australian Department of Education or the Western Australian Catholic
215 Education Office. After signing and return mailing the agreement to participate in the
216 research (consent), instructions directed each principal to disseminate the package to Head
217 of the PE department. The package included an information letter and instructions directing
218 each Head of Department to provide a copy of the terms of agreement to participation,
219 instructions, and the PE teacher's questionnaire, with a reply-paid envelope. The 234
220 respondents were initially categorised into two groups; those who were intending to stay in
221 PE teaching (*stayers*) or leave PE teaching (*changers*). An unknown numbers of PE
222 teachers employed in schools, non-recording of school names and participant names
223 prevented any calculation of return and non-return rates.

224 **Questionnaire**

225 The questionnaire was based on the PE teachers' career intentions questionnaire,
226 previously used by Mäkelä et al. (2012). This questionnaire was test-retested for reliability.
227 Since this questionnaire was previously validated with a relatively large sample, it was
228 decided to use it in Australia with some modifications. In response to previous work
229 (Whipp et al., 2007) questions were added to determine satisfaction with opportunities to
230 participate in work-related decision making. In addition, the questionnaire was modified in
231 consultation with local PE teachers ($N=6$) and two academic staff to ensure relevance to the
232 Western Australian school system and PE. As a result, questions were added relating to;

233 teaching styles used, student outcomes of focus, assessment of student learning, and
234 personal safety. The items related to career intentions yielded a Cronbach's alpha
235 coefficient of .96 and a mean interclass correlation of .96 ($F=22.24, p<.001$), which
236 confirmed reliability.

237 *Background.* The questionnaire sourced participants' gender, age, PE teaching experience,
238 school level, marital status, dependent children, university qualifications, school sector,
239 school location, teaching hours, total work hours and country of birth. Age was categorised
240 into groups: 20-30 years, 31-40 years, 41-50 years and 51 years and older. Teaching
241 experience in PE was categorised into two groups, early career teachers (teaching less than
242 six years) and experienced teachers (teaching six years or more). Consistent with others,
243 (Huberman, 1989) teachers with less than six years experience were grouped, as this time
244 represents a critical survival stage, a point of relatively high attrition, and once transitioned
245 can lead to a stage of stabilisation (Huberman, 1989).

246 *Satisfaction.* The questionnaire included also 21 questions from the Basic Satisfaction
247 Needs at Work Scale (Baard et al., 2004). These questions were referenced to "feelings
248 about your PE teaching job during the last year" with a response scale anchored at 1 (*not at*
249 *all true*) and 7 (*very true*). Clustered questions provided perceptions of the physical
250 educators' levels of needs satisfaction for teaching autonomy, competence and relatedness.
251 Behaviour motivation, teacher burnout and stress can be influenced by having the
252 experience of choice (*autonomy*), a sense of efficacy in performance (*competence*), along
253 with feelings of connectedness to the significant others in one's worklife (*relatedness*)
254 (Carson & Chase, 2009). The association of these three self-determination nutrients to

255 intrinsic motivation, job dissatisfaction and turnover intentions (Carson & Chase, 2009)
256 confirm the importance of their inclusion in this research.

257 *Career intentions.* Finally, those respondents who indicated an intention to change from
258 their current job, were asked to select from the range of prescribed options relating to their
259 career intention; retire, remain in their existing school but change focus out of PE, move to
260 another school and teach PE, relocate to another school and change focus out of PE, or
261 move out of school teaching and into another profession with a request to specify their
262 preferred career option.

263 *Reasons to leave the profession.* Respondents were asked to consider the aspects that had
264 influenced their intentions to change their work. Fifty-seven statements relating to teaching
265 PE and workload, stress, opportunities, facilities, school administration, colleagues, pupils,
266 parents, working conditions, teaching and learning outcomes, rewards, status and respect
267 were anchored with a response scale confirming the level of influence from 1 (*not at all*) to
268 5 (*very markedly*). A final question relating to their level of confidence that they could
269 achieve the intended destination of change was anchored at 1 (*no confidence*) and 5 (*very*
270 *high confidence*).

271 **Data analysis**

272 Data analysis began with descriptive statistics, representing the means and standard
273 deviations for *changers* and *stayers*. The differences in intention to leave the profession and
274 background variables were analysed with independent samples t-tests, analysis of variances
275 (ANOVA) and Mann-Whitney U-test. Cohen's *d* statistic was used to report effect size of
276 differences.

277 Principal axis factoring (PAF) with direct oblimin rotation was performed on the 57
278 items of the questionnaire to determine the reasons for considering leaving the profession.
279 These items were related to 10 factors, which were labeled as follows: opportunities (item
280 loadings .480-.923, pupils (item loadings .500-.998), school administration (item loadings
281 .673-.978), workload (item loadings .695-.909), realisation of teaching (item loadings .610-
282 .993), colleagues (item loadings .559-.888), working conditions (item loadings .462-.891),
283 expertise (item loadings .879-.941), respect (item loadings .458-.696), and isolation (item
284 loadings .464-.505). The eigenvalues of the ten scales were as follows: 20.35 (factor 1),
285 5.00 (factor 2), 3.51 (factor 3), 2.79 (factor 4), 2.44 (factor 5), 2.37 (factor 6), 1.87 (factor
286 7), 1.70 (factor 8), 1.43 (factor 9), 1.15 (factor 10), all serving, when combined, to explain
287 69.70% of total variance.

288 **Results**

289 Of the 234 PE teachers in this study 55.9% were male and 44.1% were female. From these
290 teachers 53.6% were married and 17.4% were living with a partner. Over half of the
291 respondents (51%) were teaching in government schools, nearly one third (30%) were
292 teaching in independent schools and one-fifth (19%) in the catholic school system. These
293 schools were distributed by the location as follows; metropolitan schools 73.6%, regional
294 or remote schools 26.4%. The total amount of teaching hours was 18 hours per week
295 ($SD=5.2$) and total workload was 45 hours per week ($SD=8.3$).

296 Sixty percent of the PE teachers intended to remain teaching PE (*stayers*). From these
297 teachers, 15% intended to stay in PE teaching, but change schools (*migrators*). Forty
298 percent of the PE teachers surveyed intended to leave PE teaching (*changers*); with the
299 majority (53.2%) intending to leave teaching, 4.5% were planning to retire, 22.7% wanting

300 to move to another school and change focus, and 19.6% intending to remain within their
301 existing school, but change focus. From those who intended to change focus in schools,
302 58.1% wanted to become a member of administration, while 41.9% considered moving to
303 another subject or becoming a classroom teacher. From those who intended to move
304 outside of schools, 44.5% desired to be involved in a sport or health related profession
305 (e.g., personal training, coaching, health promotion, physiotherapy). Sixteen percent
306 identified the mining industry as their choice of profession outside of teaching, while
307 17.8% identified unspecified business as their preferred profession.

308 There were no significant differences for teaching hours ($p=.36$, $d=.12$) or total
309 workload ($p=.85$, $d=.03$) between those who intended to leave the profession and those who
310 intended to stay in PE teaching. However, *changers* identified more sport related extra-
311 curricular assignments than *stayers* ($p=.033$, $d=.29$) and non-sport-related extra-curricular
312 commitments ($p=.046$, $d=.28$) (Table 1). Moreover, those who intended to change focus in
313 school (*movers*), identified more sport-related extra-curricular working hours than those
314 who intended to leave teaching (*leavers*) ($p=.008$, $d=.58$). Those who intended to leave the
315 profession had more PE teaching experience than those intending to stay in PE. Intention to
316 leave was highest in those aged 41-50 years, with 58.8% of this age group who were
317 intending to leave PE wanting a change of profession, while 41.2% were intending to
318 change teaching focus.

319 From those who intended to change profession, 35.6% identified that they had high or
320 very high levels of confidence to achieve the change. However, 24.2% of respondents
321 reported a low level of confidence to change profession, while 39.1% identified that they
322 had a moderate level of confidence to change. There were no significant differences

323 between *movers* and *leavers* in confidence levels to achieve their goal for professional
324 change.

325 *Reasons to leave the profession*

326 The most frequent reasons to leave the PE teaching profession included a desire to better
327 use their own skills and knowledge (53.0% of respondents) and expertise (52.6% of
328 respondents), work stress (38.8%), lack of time to complete allocated work (37.4% of
329 respondents), a high workload (36.4% of respondents) and an inflexible administration
330 (34.5%). When each item was grouped for conceptual similarity, perceptions of non-use of
331 expertise ranked 1st (items mean 52.8% of participants) with both individual items
332 identified most frequently (Table 2). Concerns relating to workload were most numerous in
333 the top 10 list of concerns (rating 3rd, 4th, 5th and 8th for frequency), with 31.1% of
334 respondents declaring it a marked concern, this being the second highest grouped item
335 mean. Teachers' dissatisfaction with administration was represented in six of the top 20
336 individual items of concern and ranked third of the conceptualised issues (mean item
337 response frequency = 26.2%). Issues related to teachers' opportunities to participate in and
338 influence their work ranked fourth (mean item response frequency = 20.9%) with four
339 items appearing in the top 20 (rating 7th, 11th, 19th and 20th). Three individual items relating
340 to pupils were also ranked in the top 20 (rating 14th, 15th, 16th and 20th for frequency), and
341 was the equal fifth ranked concept identified (mean item response frequency = 15.1%),
342 along with concerns for respect (Table 2). In contrast, realisation of teaching and
343 colleagues were ranked lowest of the 10 concepts evaluated. Comparison between *leavers*
344 and *movers* revealed that *leavers* identified workload to be a stronger influence on their
345 decision to leave than *movers* ($p=.002$, $d=.64$), while *movers* identified their expertise to be

346 a more significant reason to change their job than *leavers* ($p < .001$, $d = .97$). For experienced
347 teachers (worked six years or more) workload influenced more on their consideration to
348 leave the profession when compared to that reported by the early career teachers (teaching
349 less than six years) ($p = .028$, $d = .60$). Older PE teachers (age 51 years and older) identified
350 pupils as a more significant reason to leave than younger teachers (50 years and younger)
351 ($p = .008$, $d = .89$).

352 **Satisfaction**

353 When responses to the Basic Need Satisfaction Scale items were compared between
354 different groups, *stayers* in the PE teaching profession were more satisfied with the
355 autonomy, competence and relatedness in their job than those who intended to leave the PE
356 teaching profession ($p = .002-.024$, $d = .34-.42$, respectively). *Stayers* were more satisfied
357 with relatedness and competence in their work than *movers* ($p = .013-.015$, $d = .44-.45$).
358 When comparing those who intended to stay in their present PE teaching job and those who
359 intended to stay in PE but change school, *migrators* reported a significantly lower
360 satisfaction for teaching relatedness ($p = .001$, $d = .56$). Experienced teachers (teaching six
361 years or more) were more satisfied with competence in their work when compared to the
362 early career teachers ($p = .002$, $d = .46$).

363 **Discussion**

364 The purpose of this study was to determine PE teachers' career intentions and the
365 factors influencing their intentions. From the 234 PE teachers in this study, 40% identified
366 intention to leave the profession. Majority (53.2%) of PE teachers' who had an intention to
367 leave, were considering leaving teaching entirely. These results are consistent with that
368 reported in Finland (39%; Mäkelä, Hirvensalo, & Whipp 2014), and lower than data

369 previously reported for Australian PE teachers (50%; Macdonald et al., 1994) and lower
370 than in England where 80% of male and 40% of female PE teachers identified intention to
371 leave the profession (Evans & Williams, 1989). In the current study there were no
372 differences between males and females intention to leave the profession ($\chi^2(1)=.195$,
373 $p=.659$). Moreover, there was no difference in intention to leave between the school
374 sectors, ($\chi^2(2)=.656$, $p=.720$) or school locations ($\chi^2(2)=1.200$, $p=.549$). The youngest (20-
375 30 years) and oldest (50 years and older) PE teachers had lowest intentions to leave the
376 profession. These data can be evaluated through the teacher career cycle.

377 Early career teachers (teaching experience 1-5 years) are more likely to stay in the
378 profession, if they are supported by personal and organizational environments. At the
379 organizational level, it is important for teachers to receive support from peers and
380 administration (Letven, 1992). However, inconsistent with the concern for personal
381 connection, in this study, novice teachers reported significantly lower relatedness needs
382 satisfaction than their older counterparts. Colleagues have a key role in establishing a
383 positive climate that assists novice teachers to master survival skills and successfully
384 transition their career to the competence building stage (Letven, 1992). Whilst some of the
385 early career teachers appeared to overcome this deficit, a continuation of this state may
386 account for some entering, the frustration (Price, 1992a) or the reassessment stage
387 (Huberman, 1989). PE teachers may experience disenchantment, stress, coinciding with a
388 magnification in the perception of a lack of support from community and school
389 administration (Huberman, 1989; Price, 1992a).

390 Teachers who are 50 years of age or older are potentially in the career wind-down
391 stage, where they are preparing to leave the profession. For example, in Finland 90% of

392 those PE teachers, who had left the profession, had left before age of 50 years (retired
393 omitted) (Mäkelä, Hirvensalo, Laakso et al., 2013). They may have either a positive or
394 negative period following a rewarding career or unfulfilled work life experience (Burke &
395 McDonnell, 1992a).

396 Although a significant number of PE teachers desired a new profession, not all PE
397 teachers who consider leaving, actually leave the profession. According to LeCompte and
398 Dworkin (1991) only 29% of class teachers, who considered leaving the profession,
399 eventually left. Somewhat consistent with this phenomenon, of the respondents in the
400 current study, only 37% who declared an intention to leave reported a high or very high
401 confidence level to fulfill their intention. However, only follow-up of these teachers could
402 validate this speculation. Whilst only hypothetical, perhaps a lack of available promotional
403 possibilities or other job alternatives, rendered PE teachers relatively low in confidence to
404 achieve the desired change. On the other hand, it should be kept in mind that intentions to
405 change profession may vary during the academic year depending on satisfying and
406 unsatisfying factors that present unexpectedly, seasonally, or even on a day-to-day basis.
407 Moreover, with nearly three-quarters (71%) of the teachers living with a partner; personal
408 or financial commitments may also have impacted on the potential for career change. The
409 implications of retaining a considerable number of frustrated or potentially amotivated PE
410 teachers (Carson & Chase, 2009) is concerning and worthy of further investigation.

411 From those who considered changing focus in teaching ($N=95$), the majority (58%)
412 identified school administration to be the first choice for their new career. There are no
413 recent comparative data for Australian PE *changers* preferred work destination or PE
414 teachers who had successfully transitioned into administration; however, it is questionable

415 if all could be accommodated in administration roles. Furthermore, the number of these
416 teachers who held masters level qualifications ($N=5$), which might be deemed necessary to
417 be a school administrator or at least assist to appear superior to other applicants, was
418 relatively small.

419 The Australian PE teachers in this study were consistent with their Finnish colleagues
420 when expressing a strong desire for opportunities to better use their expertise (Mäkelä,
421 Hirvensalo, & Whipp 2014). In line with this finding, Lynn and Woods (2010) reported
422 that repetitiveness or, as others defined, routinisation of PE teachers' work (Macdonald et
423 al., 1994) leads to boredom and thereby inhibits PE teachers' accessing their expertise
424 (Macdonald, 1995). PE teachers may have gained expertise outside of teaching, for
425 example with possible duties in coaching, and hence feel that they have additional skills not
426 regularly used when teaching PE.

427 Worthy of note, Physical Education Studies (PES) was first externally examined in
428 Western Australian schools as a university entrance subject in 2009, this affording
429 academic equivalence with traditional subjects such as Physics, Mathematics and English.
430 The PES course is framed by sport science principles and includes content related to
431 biomechanics, functional anatomy, exercise physiology, sport psychology and motor
432 learning. Sixty nine percent of PE teachers in this sample were teaching PES. Of those who
433 wanted to leave PE teaching, less than half (48%) were teaching PES at the highest level,
434 while 58% of *stayers* taught PES. However, there were no differences in concerns for a
435 desire to better use their skills between those who were teaching PES and those who were
436 not ($p=.42$).

437 Lack of respect and isolation, whilst ranking sixth and eight, respectively, for the
438 reasons to leave (Table 2) share synergy with issue of relatedness needs satisfaction, and
439 are also found in previous studies. PE has been perceived to be a non-academic subject, or
440 not a legitimate subject (Henninger, 2007; Macdonald, 1999) with lack of respect seen as a
441 form of marginalisation. PE teachers are also expected to prove themselves intellectually
442 before they can attain the status that is equivalent to that of others (Whipp et al., 2007).
443 PES teachers in this research reported significantly higher levels of competence satisfaction
444 ($p=.001$, $d=0.51$) than those who did not teach PES. Since there is little research (e.g.,
445 Macdonald, 1995) that discusses PE teachers perceptions of the impact of teaching a
446 university entrance subject on quality of work life, level of respect and intention to remain
447 a teacher, this appears worthy of further investigation.

448 Concern for the workload was one of the most prevalent reasons for PE teachers
449 wanting to leave the profession and this is consistent with previous studies (Macdonald et
450 al., 1994; Mäkelä, Hirvensalo, & Whipp 2014; Shoval et al., 2010; Templin, 1989; Whipp
451 et al., 2007). Also comparable with past findings, the PE teachers reported the professional
452 demands of time and energy in relation to workload difficult to manage (Macdonald et al.,
453 1994; Shoval et al., 2010; Whipp et al., 2007). Such concerns are analogous with PE
454 teachers perceiving they have a *use-by-date* (Whipp et al., 2007). In this study, extra-
455 curricular assignments significantly influenced PE teachers considerations to leave PE
456 teaching. Extra-curricular activities have been identified to cause long days with coaching
457 duties and lead to role conflict (Richards & Templin, 2012; Templin, 1989). Workload can
458 also be related to the organisation of teaching. If teaching schedules are challenging or time
459 allocation for teaching is inadequate, moving back and forth between school structures and

460 facilities can be frustrating (Fejgin, Talmor, & Erlich, 2005; Lynn & Woods, 2010). PE
461 teachers in this study also identified the lack of time allocated to complete their work as a
462 significant influence on intention to leave.

463 A perceived lack of respect from school administrators has been identified previously
464 as one of the primary reasons to leave the PE teaching profession (Whipp et al., 2007).
465 Moreover, lack of respect can be translated to an increased insensitivity in the delegation of
466 workload (Whipp et al., 2007). Lack of respect may also be seen in the form of lack of
467 interest in what PE teachers are doing in their classes (Henninger, 2007). In this study, PE
468 teachers identified lack of respect or support from administration and limited trust in
469 administration as significant in their consideration to leave the profession. Consistent with
470 previous reports of administrators' ability to impact on PE teachers' feelings of
471 connectedness at work (Carson & Chase, 2009), not surprisingly, the *leavers* and *movers*
472 were significantly less satisfied with their sense of teaching relatedness when compared to
473 the *stayers*.

474 In PE, teachers are working outside of school in sports halls, swimming pools, sports
475 fields etc, and this reduces the opportunity for interaction with others (Mäkelä, Hirvensalo,
476 & Whipp 2014; Woods & Lynn, 2001). There might be also separate PE staffrooms and
477 this also reduces the possibility to interact with others and hence to support professional
478 development. Such interaction and perceived support are considered essential for beginning
479 teachers (Christensen, 2013; lisahunter, Rossi, Tinning, Flanagan, MacDonald, 2011).
480 Because of isolation, PE teachers may not have the same opportunity to share their vision
481 and ideas (Lynn & Woods, 2010) and they lack a sense of collegiality (Macdonald et al.,
482 1994). Lack of possibilities for involvement in decision making and not being listened to

483 were identified by one-fifth of PE teachers as influencing their intention to leave. This is
484 related to the scope to influence ones' job but also because of isolation, PE teachers may
485 not have the opportunity to share their concerns with other teachers. Administrators impact
486 on PE teachers' feelings of isolation at work (Carson & Chase, 2009) and consistent with
487 this, the *leavers* were significantly less satisfied with their teaching autonomy when
488 compared to the *stayers*, while *changers* also expressed significantly lower satisfaction for
489 teaching autonomy and a sense of efficacy in performance (competence) when compared to
490 *stayers*.

491 When encountered, a lack of equipment significantly impacts on PE teachers'
492 perceived satisfaction for autonomy and competence (Carson & Chase, 2009). Consistent
493 with this, the *leavers* in the existing study reported significantly lower levels of satisfaction
494 for teaching autonomy when compared to the *stayers*, while *changers* expressed
495 significantly lower satisfaction for teaching autonomy and a sense of efficacy in
496 performance (competence) when compared to *stayers*. Although not appearing to be a
497 significant influence on intention to leave for the majority of teachers in this study, when
498 perceived, poor working conditions can affect teachers' intrinsic motivation and limit the
499 educational experiences for pupils. In this study, PE teachers did not identify concerns for
500 facilities or equipment as significantly as in previous studies (Mäkelä, Hirvensalo, &
501 Whipp 2014; Shoval et al., 2010). Furthermore, teachers who perceive a lack of resources
502 are potentially more inclined to simply *roll the ball out*, thus further minimising PE student
503 outcomes (Henninger, 2007; Mäkelä, Hirvensalo, & Whipp 2014).

504 There were no differences between *movers* and *leavers* responses related to pupils. PE
505 teachers have previously expressed concern for students' poor attitudes (Moreira et al.,

506 1995), lack of motivation and disrespect for teachers (Macdonald, 1999), which can lead to
507 frustrating discipline problems without appropriate support from administration (Curtner-
508 Smith, 1997). However, respondents in this study identified concerns for the non-use of
509 expertise, workload, administration, and opportunities more frequently than student-related
510 issues. Moreover, the data could not be used to explain why the older PE teachers (age
511 51years and older) identified pupils as a more significant reason to leave than younger
512 teachers (50 years and younger). Whilst only speculative, older PE teachers may feel
513 “discipline-weary” with repetitive student-based behavior problems; in particular, the need
514 to discipline students where teachers’ perceive a lack of parent support (Whipp et al.,
515 2007). They may also lose some of their enthusiasm for sport/s, this being potentially
516 concomitant with repetitiveness of work (Lynn & Woods, 2010; Macdonald et al., 1994)
517 and therefore report pupils, and their attitude, lack of respect or relative amotivation, to be
518 a more significant reason to leave.

519 Given that a significant proportion of PE teachers perceive school administration as
520 a desirable promotion, future research that ascertains the potential opportunities for such a
521 transition and the in-service learning that could support a successful career change appears
522 warranted. Also, for those PE teachers who still want to stay in PE rather than pursue
523 promotion, enhancing the opportunities for them to use their skills could potentially serve
524 to retain PE teachers in the profession. It would also be valuable to determine the qualities
525 that school principals display when they are considered by PE teachers to be supportive.
526 Also, further exploration and understanding of the reasons that keep PE teachers productive
527 in PE is worthy of consideration.

528

Conclusion

529 The number of PE teachers intending to leave the profession was the same as in
530 Finland, but lower than that previously reported for Australian and English PE teachers. PE
531 teachers faced the career frustration stage most significantly after the age of 40. School
532 senior administrators should work to understand and elevate physical educators' needs
533 satisfaction for autonomy, competence and relatedness through mediating personal and
534 professional advancement in schools to help maintain all teachers, particularly the
535 experienced ones. The capacity to endure the time and energy needed to teach PE is
536 declining in experienced teachers. Therefore, it would appear advantageous for some
537 teachers to undertake a redistributed work allocation, in particular with less extra-curricular
538 commitments, potentially less PE teaching allocation, and enhanced access to their skills in
539 other school-related work such as school senior administration. Facilitating personal and
540 professional opportunities for PE teachers will also enhance collaboration with colleagues
541 and thus reduce isolation, all serving to increase the quality of work-life for a significant
542 number of PE teachers. Retaining qualified, experienced PE teachers is essential for
543 children to promote lifelong physical activity and support every child to find their own way
544 to move and promote their physical fitness.

545 **References**

- 546 Armour KM and Jones RL (1998) *Physical education teacher's lives and careers: PE,*
547 *sport, and educational status.* London, England: Falmer Press.
- 548 Baard PP Deci EL and Ryan RM (2004) Intrinsic need satisfaction: A motivational basis of
549 performance and well-being in two work settings. *Journal of Applied Social*
550 *Psychology* 34: 2045-2068.
- 551 Boe EE (2007) *Trends in the turnover of teachers from 1991 to 2004: Attrition, teaching*
552 *area transfer, and school migration.* Philadelphia, PA: University of Pennsylvania.
- 553 Burke PJ and McDonnell (JH 1992a) Competency building. In: R Fessler and JC
554 Christensen (ed) *Teacher career cycle: Understanding and guiding the professional*
555 *development of teachers.* Needham Heights, MA: Allyn & Bacon, pp 87-117.
- 556 Burke PJ and McDonnell JH (1992b) Enthusiastic and growing. In: R Fessler and JC
557 Christensen (ed) *Teacher career cycle: Understanding and guiding the professional*
558 *development of teachers.* Needham Heights, MA: Allyn & Bacon, pp 119-152.
- 559 Carson RL and Chase MA (2009) An examination of physical education teacher motivation
560 from a self-determination theoretical framework. *Physical Education and Sport*
561 *Pedagogy* 14: 335-353.
- 562 Christensen E (2013) Micropolitical staffroom stories: Beginning health and physical
563 education teachers' experiences of the staffroom. *Teaching and Teacher Education*
564 30: 74-83.
- 565 Christensen J (1992) Preservice education. In: R Fessler and JC Christensen (ed) *The*
566 *teacher career cycle: Understandin and guiding the professional development of*
567 *teachers.* Needham Heights, MA: Allyn & Bacon, pp 45-58.

- 568 Christensen JC and Fessler R (1992) Teacher development as a career-long process. In: R
569 Fessler and JC Christensen (ed) *The teacher career cycle. Understanding and*
570 *guiding the professional development of teachers*. Needham Heights, MA: Allyn
571 and Bacon, pp 1-20.
- 572 Curtner-Smith MD (2001) The occupational socialization of a first-year physical education
573 teacher with a teaching orientation. *Sport, Education and Society* 6: 81-105.
- 574 Curtner-Smith MD (1997) The impact of biography, teacher education, and organizational
575 socialization on the perspectives and practices of first-year physical education
576 teachers: Case studies of recruits with coaching orientations. *Sport Education and*
577 *Society* 2: 73-94.
- 578 Day C Stobart G Sammons et al. (2006) *Variations in teachers' work, lives and*
579 *effectiveness*. London, England: Department for Education and Skills.
- 580 Deci EL Ryan RM Gagne M et al. (2001) Need satisfaction, motivation, and well-being in
581 the work organizations of a former eastern bloc country: a cross-cultural study of
582 self-determination. *Personality and Social Psychology Bulletin* 27: 930-942.
- 583 Evans J and Williams T (1989) Moving up and getting out: The classed, gendered career
584 opportunities of physical education teachers. In: TJ Tempin and PG Schempp (ed)
585 *Socialization into physical education: Learning to teach*. Indianapolis, IN:
586 Benchmark Press, pp 235-250.
- 587 Fejgin N Talmor R and Erlich I (2005) Inclusion and burnout in physical education.
588 *European Physical Education Review* 11: 29-50.
- 589 Fessler R and Christensen J (1992) *Teacher career cycle: Understanding and guiding the*
590 *professional development of teachers*. Needham Heights, MA: Allyn & Bacon.

- 591 Froehlich H (2007) Institutional belonging, pedagogic discourse and music teacher
592 education: The paradox of routinization. *Action, Criticism, and Theory for Music*
593 *Education* 6: 7-21.
- 594 Henninger ML (2007) Lifers and troupers: Urban physical education teachers who stay.
595 *Journal of Teaching in Physical Education* 26: 125-144.
- 596 Huberman M (1989) The professional life cycle of teachers. *Teachers College Record* 91:
597 31-57.
- 598 Ingersoll RM (2001) Teacher turnover and teacher shortages: An organizational analysis.
599 *American Educational Research Journal* 38: 499-534.
- 600 Kougioumtzis K Patriksson G and Stråhlman O (2011) Physical education teachers'
601 professionalization: A review of occupational power and professional control.
602 *European Physical Education Review* 17: 111-129.
- 603 Kulinna PH Cothran DJ and Regualos R (2006) Teachers' reports of student misbehavior on
604 physical education. *Research Quarterly for Exercise and Sport* 77: 32-40.
- 605 LeCompte MD and Dworkin AG (1991) *Giving up on school: Student dropouts and*
606 *teacher burnouts*. Newbury Park, CA: Corwin Press.
- 607 Letven E (1992) Induction. In: R Fessler and JC Christensen (ed) *Teacher career cycle:*
608 *Understanding and guiding the professional development of teachers*. Needham
609 Heights, MA: Allyn & Bacon, pp 59-86.
- 610 Lisahunter Rossi T Tinning R Flanagan E Macdonald D (2011) Professional learning
611 places and spaces: the staffroom as a site of beginning teacher induction and transition.
612 *Asian-Pacific Journal of Teacher Education* 39: 33-46.

- 613 Lynn SK and Woods AM (2010) Following the yellow brick road: A teacher's journey
614 along the proverbial career bath. *Journal of Teaching in Physical Education* 29: 54-
615 71.
- 616 Macdonald D (1995) The role of proletarianization in physical education teacher attrition.
617 *Research Quarterly for Exercise and Sport* 66: 129-141.
- 618 Macdonald D (1999) The "professional" work of experienced physical education teachers.
619 *Research Quarterly for Exercise and Sport* 70: 41-54.
- 620 Macdonald D Hutchins C and Madden J (1994) To leave or not to leave: Health and
621 physical education teachers' career choices. *ACHPER Healthy Lifestyles Journal* 4:
622 19-23.
- 623 Mäkelä K (2014) PE teachers' job satisfaction, turnover, and intention to stay or leave the
624 profession. PhD dissertation, University of Jyväskylä, Finland.
- 625 Mäkelä K Hirvensalo M Laakso L et al. (2014) Physical education teachers in motion: an
626 account of attrition and area transfer. *Physical Education and Sport Pedagogy* 19:
627 418-425.
- 628 Mäkelä K, Hirvensalo M, Palomäki S, et al. (2012) Liikunnanopettajaksi vuosina 1984-
629 2004 valmistuneiden työtyytyväisyys [Job satisfaction among physical education
630 teachers who graduated in 1984–2004]. *Liikunta & Tiede* 49: 67-74.
- 631 Martinez K. (2004) Mentoring new teachers: Promise and problems in times of teacher
632 shortage. *Australian Journal of Education* 48: 95–108
- 633 McCaughtry CJ Barnard S Matin J et al. (2006) Teachers' perspectives on the challenges of
634 teaching physical education in urban schools: The student emotional filter.
635 *Research Quarterly for Exercise and Sport*, 77: 486-497.

- 636 McDonnell JH and Burke PJ (1992a) Career wind-down. In: R Fessler and JC Christensen
637 (ed) *Teacher career cycle: Understanding and guiding the professional*
638 *development of teachers*. Needham Heights, MA: Allyn & Bacon, pp 191-219.
- 639 McDonnell JH and Burke PJ (1992b) Career exit. In: R Fessler and JC Christensen (ed)
640 *Teacher career cycle: Understanding and guiding the professional development of*
641 *teachers*. Needham Heights, MA: Allyn & Bacon, pp 219-248.
- 642 Moreira H Sparkes AC and Fox K (1995) Physical education teachers and job commitment.
643 A preliminary analysis. *European Physical Education Review* 1: 122-136.
- 644 O'Sullivan M (2006) Professional lives of Irish physical education teachers: stories of
645 resilience, respect and resignation. *Physical Education and Sport Pedagogy* 11:
646 265-284.
- 647 Price JR (1992a) Career Frustration. In: R Fessler and JC Christensen (ed) *Teacher career*
648 *cycle: Understanding and guiding the professional development of teachers*.
649 Needham Heights, MA: Allyn & Bacon, pp 153-170.
- 650 Price JR (1992b) Stability. In: R Fessler and JC Christensen (ed) *Teacher career cycle:*
651 *Understanding and guiding the professional development of teachers*. Needham
652 Heights, MA: Allyn & Bacon, pp 171-190.
- 653 Richards KAR and Templin TJ (2012) Toward a multidimensional perspective on teacher-
654 coach role conflict. *Quest* 64:164-176.
- 655 Shoval E Erlich I and Fejgin N (2010) Mapping and interpreting novice physical education
656 teachers' self-perceptions of strengths and difficulties. *Physical Education and*
657 *Sport Pedagogy* 15: 85-101.

- 658 Sikes P (1985) The life cycle of the teacher. In: SJ Ball and IF Goodson (ed) *Teachers'*
659 *lives and careers* London, England: The Falmer Press, pp 27-60.
- 660 Smyth DM (1995) First-year physical education teachers' perceptions of their workplace.
661 *Journal of Teaching in Physical Education* 14: 198–214.
- 662 Solomon M, Terry W and Carter JA (1993) The interaction of school context and role
663 identity of First-year teachers. *Journal of Teaching in Physical Education* 12: 313-
664 328.
- 665 Steffy BE Wolfe MP Pasch SH et al. (2000) The model and its application. In: B. Steffy
666 (ed), *Life cycle of the career teacher*. Thousand Oaks, CA, Corwin Press, Inc, pp 1-
667 25.
- 668 Stroot SA Faucette N and Schwager SM (1993) In the beginning: The induction of physical
669 educators. *Journal of Teaching in Physical Education* 12: 375-385.
- 670 Templin TJ (1989) Running on ice: A case study of the influence of workplace conditions
671 on a secondary school physical educator. In: TJ Templin and PG Schempp (ed)
672 *Socialization into physical education: Learning to teach*. Indianapolis, IN:
673 Benchmark Press, pp 165-197.
- 674 Whipp PR Anderson MJ Yeo PT et al. (2006) Teacher's perceptions of outcomes-focused
675 assessment and reporting in health and physical education in Western Australian
676 secondary schools. *ACHPER Healthy Lifestyles Journal* 53: 26-32.
- 677 Whipp PR, Tan G and Yeo PT (2007) Experienced physical education teachers reaching
678 their "use-by date:" Powerless and disrespected. *Research Quarterly for Exercise*
679 *and Sport*, 78: 487-499.

680 Woods AM and Lynn SK (2001) Through the years: A longitudinal study of physical
681 education teachers from a research-based preparation program. *Research Quarterly*
682 *for Exercise and Sport*, 72: 219-231.

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