

Longitudinal Analysis of Head Coach Employee Turnover of Women's NCAA D-I Teams

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Existing research documents the percentage of women head coaches of women's intercollegiate sport teams which has remained stagnant for over 30 years, barriers women face, and women's intentions, aspirations, and decisions to leave coaching. The purpose of this study was to longitudinally examine head coach occupational trends and employee turnover of a select group of women's teams within elite intercollegiate conferences. Data on head coach gender, age, and attribution given for employee turnover was collected between the 2012-2013 and 2020-2021 academic years. Based on the data, gender and age-related employee turnover patterns emerged. Men are more likely to obtain coaching positions regardless of reason for separation and twice as likely to be employed at the same level and position than women. Women enter at a younger age and voluntarily leave head coaching positions at higher rates than men. Data herein will help illuminate patterns of gender discrimination experienced by women sport coaches.

Keywords: occupational transition, sport, coaching, gender, age

Since the inception of Title IX, the percentage of women head coaches of women's sports has declined drastically. Specifically, the percentage dropped from over 90% in 1974 to 43% in 2014 (Acosta & Carpenter, 2014), and has remained remarkably stagnant for over a decade (LaVoi & Boucher, 2020). As sport and gender equity scholars argue how to understand this decline, one must understand the persistence and history of male power, male dominance, and male leadership ingrained in sport culture (Kane, 2016; Knoppers, 1989). In the National Collegiate Athletic Association (NCAA) a majority of all head coach and athletics director (AD) positions are held by men, who typically hire a majority of men (Boucher, 2019; Lapchick et al., 2020). Many male ADs blame women for the under-representation of women as coaches, while female ADs cite structural issues for the origin of stagnation (Kane & LaVoi, 2018), a persistent finding over decades (Acosta & Carpenter, 1988). Work-family conflict for women coaches is one attribution shared by men and women ADs, which has become a common blaming narrative. What is missing and gets



erased is that men also experience work-family conflict but this is rarely mentioned. Few male ADs, arguably gender allies (Heffernan, 2018), recruit, hire, and retain a majority of women head coaches for their women's teams intentionally and unapologetically in an attempt to unstick the stagnation (LaVoi & Wasend, 2018).

In the current study longitudinal data of head coach employee turnover within women's teams at the NCAA D-I level was examined to add unique insights into head coach turnover patterns across multiple variables. Although several authors have examined turnover and turnover intentions among coaches (Cunningham et al., 2019; Wells & Peachey, 2011; Ryan & Sagas, 2009), this study is the first to examine turnover patterns of intercollegiate sport coaches longitudinally. Data will provide a more complete and nuanced picture of the NCAA occupational and organizational landscape within women's athletics that can be used to confirm or dispel narratives, identify and illuminate gendered patterns of discrimination, and create systems change.

Literature Review

Employee Turnover in the United States

Employee turnover is when an employee separates from the organization for any reason such as resigning, being fired, taking a new job, or retiring, and is replaced by someone new (U.S. Department of Labor, 2013). Employee turnover is an unavoidable reality in every workplace. According to the U.S. Department of Labor (2013-2021) the average annual rate of employee separation over the last eight years across all industries was 43.9%; one-third of those employees involuntarily separated. Employee separation steadily increased every year until 2020, when it jumped to 57% due to the COVID-19 pandemic (U.S. Department of Labor, 2021). However, no matter the year, reason, or separation rate, employee turnover does not come without cost.

Although variable by industry and company, the average cost of replacing an employee is estimated to be 21% of that employee's annual salary (Boushey & Glynn, 2012). Replacement costs are attributed to a combination of variables such as exit interviews, severance, advertisements for the job opening, interviewing candidates, background verification, and new employee training and onboarding (Boushey & Glynn, 2012). Turnover related costs to the employer also accrue in a variety of indirect ways such as lost productivity from the exiting employee, reduced quality of work during the transition period, and potential loss of business or clients during the turnover process (Boushey & Glynn, 2012). Because of the extremely high employee separation rate and costs associated with employee turnover, studying turnover patterns are important to create stable workplaces and reduce costs.

Meta-analyses indicated the most salient predictor of employee turnover was low organizational commitment and job satisfaction—the less committed and satisfied an employee, the more likely they are to leave or be fired (Griffeth et al., 2000). Job design and environmental factors like autonomy and control, job content, and job demands did not significantly predict employee turnover and reasons for turn-

over still varied greatly between jobs and populations (Griffeth et al., 2000). The specific job and population examined in the current study are head coaches of women's teams at the NCAA Division-I level. What is known about occupational turnover of sport coaches is summarized next.

Sport Coach Employee Turnover

Employee turnover in sport coaching is important to examine due to the organizational and human costs involved (Humphreys et al., 2016; Knoppers, 1989; Raedeke et al., 2002). Employee turnover herein is used to encompass both organizational (coaching, but at different institution/organization) and occupational (no longer coaching) turnover both of which incur costs. For example, the cost of losing potential recruits and damaging relationships with current players (Ryan & Sagas, 2009) and impacts to a program's reputation, attendance, and fundraising (Pierce et al., 2017) are unique costs of head coach turnover for athletic departments to manage. Subsequently, researchers have examined coach turnover intention to understand how to mitigate and minimize voluntary turnover (Cunningham & Sagas, 2003; Cunningham & Sagas, 2004; Darvin, 2020; Raedeke et al., 2002; Ryan & Sagas, 2009).

Recently, Darvin (2020) interviewed former NCAA women assistant coaches about their experiences and reasons for voluntary occupational turnover which included the toxic culture of recruiting, destructive leadership styles of the head coach, burnout, and work-family conflict (WFC). Work-family conflict involves issues such as missing a family event for a game or behaving negatively at home due to a bad practice or contest loss and is a commonly cited reason for coach turnover (Dixon & Bruening, 2007). Work-family conflict is a broad umbrella of common women-blaming narratives in sport coaching (LaVoi, 2016) that perpetuate gender bias and stereotypes. In short, these 'family' of narratives purport that women experience more WFC and thus leave coaching positions sooner and more often than men (Bruening & Dixon, 2008; Kane & LaVoi, 2018). Blaming narratives persist despite data which confirmed no significant WFC gender differences—male and female coaches with children reported similar conflicts, career and organizational commitment, and satisfaction (Graham & Dixon, 2014, 2017; Schenewark & Dixon, 2012). Athletic administrators in intercollegiate sports often perpetuate blaming women for the lack of women, to rationalize unjust recruitment and hiring practices (Kane & LaVoi, 2018; Staurowsky et al., 2017), and perpetuate gender inequalities (Cunningham et al., 2019). Unfortunately, blaming narratives are likely internalized by women which limit and impact career decision making and the trajectory of women coaches.

The most significant knowledge to date on the multilevel factors of occupational turnover, gender, and coaching is a 2019 meta-analysis conducted by Cunningham and colleagues. The key and statistically significant findings of their meta-analysis included: women had higher occupational turnover and turnover intentions than did men; women were younger than men and worked in coaching for a shorter period of time; and women identified more barriers to enter and stay in coaching than men (Cunningham et al., 2019). Thus, as stated by Cunningham and colleagues, "occu-

pational turnover is likely embedded in the coaching profession, and not limited to a particular organization on context” (2019, p. 69). Their meta-analysis helped forward understanding of gender difference in occupational turnover decisions. The current paper also fills gaps in scholarly inquiry related to employee (i.e., both occupational and organizational) turnover by examining trends by gender over time.

The multilevel systemic barriers of bias, discrimination, and mistreatment of women coaches is well documented and influences entry into, experience throughout, and desire to leave coaching (Burton & LaVoi, 2016; Cunningham et al., 2019; Darwin, 2020; LaVoi, 2016; LaVoi & Dutove, 2012). Recent data highlighted nuance related to women coaches’ age, gender, and racial bias. Data indicated that women of color held coaching positions for less time (3 years on average) and took one year longer to reach a head coaching position than white male peers (Larsen & Clayton, 2019). Hollomon (2016) noted women of color often do not apply for sport leadership positions due to perceived barriers. However, intersectional analysis of occupational turnover is limited.

Significance of the Study

The current study is significant for numerous reasons. Longitudinal examination of head coach turnover patterns of women’s intercollegiate teams is non-existent. Data herein add to the type of empirical data available to analyze coach turnover, as data type is limited (Cunningham et al., 2019) and most is cross-sectional. Second, it provides a baseline for the employee turnover rate of head coaches, and documents if those rates differ by sport, institution, conference, gender, and age. Analyses and application of data can help change, confirm, or dispel common blaming narratives about women coaches. For example, it is a common belief among women’s sport advocates that women coaches who are fired do not get ‘second chances’ at a similar competitive level or position, an opportunity thought to be commonly afforded to male colleagues. Data herein will provide evidence of support or non-support this belief. Longitudinal data can illuminate if patterns of gender and/or age discrimination of head coaches of women’s sport teams exists or emerged over time.

Given that a large majority of all women are located in head coach positions of women’s teams, results may have important implications for recruiting, hiring, and retaining women. Examination of turnover patterns of the most lucrative, powerful, and visible head coaching positions in women’s intercollegiate sports may provide additional insight into the gendered nature of the organizational structure which privileges men. As Cunningham and colleagues contended, “over time, small gender differences in career choices, such as turnover, can accumulate to create sizeable effects,” and lead to a “supply-side shortage of women in coaching” (2019, p. 63, 68). Scholars and practitioners alike search for answers to the ‘leaky pipeline’ of women in sport coaching, and therefore understanding the origin and extent of turnover is warranted.

The current paper complements and extends data on employee turnover of NCAA intercollegiate sport coaches. Much of existing literature has focused on in-

tentions, aspirations, or decisions to leave the coaching occupation (Cunningham et al., 2019; Darvin, 2020), not the actual turnover rate, trends, or resultant employment of a specific coaching population. The current study also fulfills the call to include more intersectional analysis of coaches and how aspects of identity relate to and can uncover patterns of discrimination within occupational turnover (Cunningham et al., 2019; LaVoi, 2016), by analyzing age with gender. Little is known about age discrimination patterns in sport coaching and this study included analysis of age of outgoing and incoming coaches.

These data also specifically document the nuanced patterns of head coach turnover rates by conference, sport, and institution within the “Select 7” NCAA D-I conferences. The Select 7 include: The Power 5 – Atlantic Coast Conference (ACC), Big 12, Big Ten, Pacific 12 (Pac-12), Southeastern Conference (SEC) – plus the Big East, and the American Athletic Conference (AAC). Data will shine a light on which organizational cultures may value and support women, and which do not. Explicit examination of the institutional attribution given (whether voluntary or involuntary) to coach turnover by gender of the coach is also explored. Perhaps most importantly the current occupational status of the outgoing coaches is included which provides insightful data pertaining to who gets rehired or not, and at what level and occupational role. Lastly, scholars have argued the degree to which, and factors that influence, gender differences in occupational turnover, and questions remain unanswered (Cunningham et al., 2019). The simultaneous examination of occupational patterns of men and women coaches of women's teams will provide a more complete picture of the occupational landscape of NCAA women's athletics. The overarching purpose of this study was to add to empirical data by confirming or refuting gender differences in occupational turnover of sport coaches.

The following research questions guided the current study:

1. What is the rate of Select 7 head coach turnover by year and longitudinally over time?
 - a. Does employee turnover differ by gender, sport, conference, and institution?
2. Do age-related turnover patterns exist between male and female coaches in the Select 7?
3. What are the institutional reasons given for head coach turnover, and are there differences in prevalence and origin (reason given) of turnover between male and female coaches in the Select 7?
4. What is the current occupational status of former Select 7 head coaches of women's teams?

Method

Between the 2012-2013 and 2020-2021 academic years, a research team tracked and documented the occupational trajectories of head coaches of women's teams in a select group of athletic conferences (Boucher et al., 2021; LaVoi, 2013). The original

athletic conferences in the first year of study included: The Power 5 conferences plus the Big East. In 2014, the AAC was included following the realignment from the Big East. Wichita State was added to the dataset in 2017 following their introduction into the AAC.

For the current study, a longitudinal dataset comprised of data over eight years was examined which included all head coaches of women's teams for schools in the aforementioned seven athletic conferences. The dataset included variables pertaining to head coaches who experienced occupational turnover (outgoing) and the head coaches who replaced the outgoing head coach (incoming). A coding key was developed by the primary researcher to collect information to answer the research questions and is available upon request. Institutional Review Board approval was not warranted as all data were publicly accessible. The coding key included demographic variables of the outgoing and incoming coaches such as turnover year, conference, institution, sport, first and last name, and age. The following variables of outgoing coaches were collected included coaching change reason, current coaching status, coaching level, institution or program, and coaching position.

In January 2021, data were collected by examination of online coaching biographies for each coach who experienced turnover (if available) from their current institutional online coach biography (if still coaching), LinkedIn accounts, or online news articles, to determine current occupational status. Coach age was determined by undergraduate graduation year listed in the coach's online coaching biography or personal LinkedIn account. This is an imperfect measure as some coaches may have graduated at a younger or older age, yet this method helped the research team standardize the data in an efficient manner. Future research utilizing age should confirm age or date of birth with coaches when feasible.

Turnover was categorized by four dichotomous 'gender change pairs': an outgoing man was replaced by an incoming woman (male-female), a man was replaced by a man (male-male), a woman was replaced by a man (female-male), and a woman was replaced by a woman (female-female). The origin of coach turnover, or the attribution given for the outgoing coach's departure, was gleaned through official institutional press releases. Institutional reason for turnover was coded into one of four themes: Retired, Institutional Decision (e.g., fired, contract not renewed), Coach Decision (coach left on their own accord, resigned, took another coaching job, left coaching), and Other (e.g., died, no reason could be found, team/coach suspended at time of data collection). The official institutional press release was used for the source of turnover, rather than fan blogs, Op-eds, or newspaper articles to provide a consistent and credible informational source. Frequency distributions, crosstabs, and *t*-tests were used to calculate and analyze the data using the IBM SPSS Statistics Processor.

Results

Over the eight years of this longitudinal study, 2013-14 through 2020-2021 academic years, a total of 7660 ($n = 3164$, 41.3% women; $n = 4496$, 58.7% men) head coaching positions comprised the coaching staffs for women's NCAA Division I

teams at 86 institutions, 23 sports, and seven conferences (Table 1). Although the total number of coaches in the sample year-by-year varied slightly due to conference realignments or program or position eliminations or additions, a majority of the head coach positions were held by men. While the percentage of women remained low, this data point increased slightly for the last seven years.

Table 1

Longitudinal Percentage of Head Coaches of NCAA D-I Women's Teams by Gender and Academic Year

Year	All Head Coaches				
	Total Positions	Female		Male	
	<i>N</i>	<i>n</i>	%	<i>n</i>	%
2013-14*	883	350	39.6	533	60.4
2014-15**	969	390	40.2	579	59.8
2015-16	967	397	41.1	570	58.9
2016-17	964	397	41.2	567	58.8
2017-18***	970	402	41.4	568	58.6
2018-19	971	406	41.8	565	58.2
2019-20	972	411	42.3	561	57.7
2020-21	964	411	42.6	553	57.4
Total Sample	7660	3164	41.3	4496	58.7

Note. *First year coach occupational turnover was collected; **Sample increased due to conference realignments and adding the American Conference. ***Sample increased due to entrance of Wichita State.

Longitudinal Coach Turnover by Variable

Frequency distributions were conducted to determine patterns of the overall rate of coach turnover by year, conference, sport, and institution. Based on the longitudinal data over eight years, a total of 665 of 7660 head coaches experienced organizational or occupational turnover which calculated to an average employee turnover rate of 8.7% each year (Table 2). Over eight years a majority (58.7%) of incoming

head coaches hired were men. Outgoing men were replaced most frequently by other men (40.3%) and outgoing women replaced by incoming men (female-male) was the most infrequent occurrence (16.8%).

By Year

The 2018-19 academic year exhibited the highest rate (12.9%) and 2020-21 the lowest rate (5.7%) of head coach turnover. The average rate of turnover for women coaches (258 of 3164; 8.2%) was slightly lower than for men (407 of 4496; 9.1%). See Table 2.

By Conference

The AAC evidenced the highest turnover rate for all coaches (74 cases of a possible 759; 9.8%) and the highest turnover rate for women coaches (42.3%) (Table 3). The Big East (69 cases of a possible 850; 8.1%) and SEC (94 cases of possible 1254; 7.5%) had the lowest rates of total coach turnover by conference. The SEC recorded the lowest rate for women (25.5%). Notably, the Big East and the SEC had similar rates of overall coach turnover, but the SEC turnover rate for women (25.5%) was significantly lower than the Big East (42%).

By Sport

The sports with the highest (alpine skiing, water polo, beach volleyball, nordic skiing) and lowest (equestrian, squash, triathlon) coach turnover rates were emerging NCAA sports or sports not commonly offered/sponsored at NCAA institutions (See Table 4). Cross country (12.4%) and soccer (6.7%), offered at nearly every NCAA D-I institution and therefore very common, were the sports with the highest and lowest rate of overall coach turnover respectively. Sports with the highest and lowest turnover rates for women were sports that have very few (alpine skiing, water polo) or a majority of women (field hockey, lacrosse, equestrian, golf) head coaches within the respective sports.

By Institution

Georgetown had the highest overall organizational turnover rate for men and women coaches (19 of 103 18.4%) and Baylor had the lowest (2 of 75, 2.7%) over eight years. Appendix A is available by request for full results of all institutions. On average over eight years, institutions experienced approximately one head coach position turnover each year. Houston had the highest rate (26.3%) of organizational turnover for women and five institutions had no (0%) women head coaches turnover across eight years (Arkansas, Xavier, Oklahoma, Kentucky, Creighton). When high/low rates of turnover for women are looked at in combination with the overall percentage of women head coaches at that institution over time, a story of institutional culture possibly emerges. For example, Houston had a high turnover rate for women (26.3%) but employed very few women (19 of 70, 27.1%) over eight years. Kentucky had zero (0%) women coaches turnover and similar to Houston also employed very few women (16 of 96, 16.7%). Conversely, Oklahoma had zero women coaches turnover but a majority of their head coaches were women (48 of 80, 60%).

Table 2
Longitudinal Employee Turnover Numbers, Percentages, and Rates of Head Coaches of NCAA D-1 Women's Teams by Gender and Academic Year

Year of Study	Academic YEAR	Outgoing-Incoming Coach Gender Change Pair										Total Coaches N	Total Coach Turnover	
		Male-Male		Female-Male		Male-Female		Female-Female		n	%			
		n	%	n	%	n	%	n	%					
1	2013-14	35	52.2	15	22.4	10	14.9	7	10.4	883	67	7.6		
2	2014-15	41	49.4	9	10.8	15	18.1	18	21.7	969	83	8.6		
3	2015-16	26	34.7	13	17.3	21	28.0	15	20.0	967	75	7.8		
4	2016-17	27	38.6	10	14.3	12	17.1	21	30.0	964	70	7.3		
5	2017-18	40	45.5	13	14.8	17	19.3	18	20.5	970	88	9.1		
6	2018-19	43	34.4	24	19.2	28	22.4	30	24.0	971	125	12.9		
7	2019-20	38	37.3	17	16.7	22	21.6	25	24.5	972	102	10.5		
8	2020-21	18	32.7	11	20.0	14	25.5	11	20.0	964	55	5.7		
TURNOVER TOTAL		268	40.3	112	16.8	139	20.9	145	21.8		665	8.7		
SAMPLE TOTAL		Total Males 4496				Total Females 3164				7660				
		Total Males Hired				Total Females Hired								
		n		%		n		%						
		380		57.1		284		42.9						

Note. One position left unfilled at time of data collection and not part of the outgoing-incoming coach gender change pair.

Table 3
Highest to Lowest Longitudinal Rate of Head Coach Turnover by Conference and Gender

Conference	Coach Turnover					
	Total Coach Turnover		Women HC		Men HC	
	N	n	%-turnover rate	n	N	%
AAC*	74	35	47.3	39	759	9.8
Pac-12	117	45	38.5	72	1204	9.7
ACC	125	47	37.6	78	1349	9.3
Big 10	122	51	41.8	71	1453	8.4
Big 12	64	27	42.1	37	791	8.1
Big East	69	29	42.0	40	850	8.1
SEC	94	24	25.5	70	1254	7.5

Note. \wedge Conf total calculated by adding up total # of women's teams for each conference x eight years. Total Coach Turnover Rate = total coach turnover/Conf \wedge Total
 *AAC was added to sample during the 2014 - 2015 academic year; accounts for lower total

Table 4
Highest to Lowest Longitudinal Rate of Head Coach Turnover by Sport and Gender

Sport	Coach Turnover						
	Total Coach Turnover		Women HC		Men HC	Sport Total [^]	Coach Turnover Rate Over Time
	N	n	%-rate turnover	n	N	%	
Alpine Skiing	4	0	0.0	4	25	16.0	
Water Polo	9	0	0.0	9	63	14.3	
Beach Volleyball	14	6	42.9	8	108	13.0	
Nordic Skiing	2	1	50.0	1	16	12.5	
Cross Country Run	83	20	24.1	63	679	12.2	
Diving	53	6	11.3	47	459	11.5	
Volleyball	68	25	36.8	43	664	10.2	
Softball	54	36	66.7	18	562	9.6	
Gymnastics	26	15	57.7	11	275	9.5	
Basketball	63	38	60.3	25	678	9.3	
Tennis	61	32	52.5	29	674	9.1	

Table 4, continued

Swimming	42	6	14.3	36	503	8.3
Ice Hockey	5	2	40.0	3	64	7.8
Rifle	5	3	60.0	2	64	7.8
Crew/Rowing	24	7	29.2	17	313	7.7
Track	47	7	14.9	40	659	7.1
Fencing	6	1	16.7	5	88	6.8
Soccer	44	7	15.9	37	665	6.6
Field Hockey	10	10	100.0	0	184	5.4
Golf	31	23	74.2	8	593	5.2
Lacrosse	11	11	100.0	0	230	4.8
Bowling	1	0	0.0	1	23	4.3
Equestrian	2	2	100.0	0	66	3.0
Squash	0	0	0.0	0	1	0.0
Triathlon	0	0	0.0	0	4	0.0

Note: Sport Total calculated by added up total # of women's teams for each sport x eight years

Analysis of Age

Descriptive statistics were run to determine the age of outgoing and incoming coaches.

Outgoing Coaches

At the time of data collection coach age could not be discerned for seven coaches and were excluded from the following analysis ($N = 658$). The mean age for all outgoing coaches was 47.5 with a range from 24-75 years old (Table 5). On average, women experienced employee turnover 5.3 years earlier and at a younger age ($M_{\text{age}} = 44.21, \pm 9.03$) than men ($M_{\text{age}} = 49.52, \pm 10.84$), which was statistically significant [$t(613.48) = -6.81, p < 0.001$].

Incoming Coaches

The mean age for all incoming coaches was 39.4 with a range from 23-70 years old (Table 5). On average, women were hired at a younger age ($M_{\text{age}} = 37.07, \pm 7.42$) than men ($M_{\text{age}} = 41.13, \pm 8.91$), which was statistically significant [$t(651.19) = -6.38, p < 0.001$]. The age of the youngest incoming female and male incoming coaches were the same (age = 23), while the age of the oldest incoming female (age = 60) varied from the oldest incoming male coach (age = 70).

Table 5

Longitudinal Mean Age Comparison by Gender of Outgoing and Incoming Head Coaches

	Female					Male					<i>t</i>
	<i>n</i>	Min Age	Max Age	<i>M</i>	<i>SD</i>	<i>n</i>	Min Age	Max Age	<i>M</i>	<i>SD</i>	
Outgoing	257	24	69	44.21	9.03	406	24	75	49.52	10.84	-6.81*
Incoming	284	23	60	37.07	7.42	375	23	70	41.13	8.91	-6.38*

Note. * $p < 0.001$

Employee Turnover by Gender Change Pair by Age

As noted earlier, over eight years a majority of incoming head coach hires were men.

Paired sample *t* tests were used to determine if significant differences were present between the average age of an outgoing coach and the incoming coach who replaced them by gender. Results revealed when outgoing female coaches were replaced by men (female-male gender change pair), the most infrequent occurrence, no significant difference between outgoing and incoming age existed (Table 6). In all

other gender change pairs (male-female, female-female, male-male) statistically significant age differences between outgoing and incoming coaches were observed. The largest age differential (~13 year difference) was evidenced when a younger female replaced an outgoing older male.

Table 6
Mean Age Comparisons by Coach Gender Change Pair

Change Pair	<i>N</i>	Outgoing		Incoming		<i>M</i> _{difference}	<i>t</i>
		<i>M</i> _{age}	<i>SD</i> _{age}	<i>M</i> _{age}	<i>SD</i> _{age}		
Male-Female	139	50.78	11.07	36.91	7.89	13.87	12.92*
Female-Female	145	44.35	9.12	37.23	6.96	7.12	9.04*
Male-Male	264	48.92	10.26	41.07	9.19	7.85	9.44*
Female-Male	109	44.08	8.75	41.24	8.33	2.84	2.60

Note. * $p < 0.001$

Institutional Attribution for Coach Turnover

To examine and discern patterns in the origin and institutional reasons provided for coach organizational turnover, reasons were coded and subsequently condensed into four themes: Retired, Institutional Decision (e.g., fired, contract not renewed), Coach Decision (coach left on their own accord, resigned, took another coaching job, left coaching), and Other (e.g., died, no reason could be found, team/coach suspended at time of data collection). The official institutional press release was used for the source of occupational turnover, rather than fan blogs, Op-eds, or newspaper articles to provide a consistent and credible informational source.

Overall, Coach Decision was the most common reason and accounted for nearly half of all coach turnover attributions (46.9%), followed by Institutional Decision (22%), and Retirement (14%) (Table 7). Comparatively, women evidenced a higher rate of Coach Decision (voluntary) and Institutional Decision (involuntary) reasons than men, and men retired at a higher rate than women. Chi-square analysis revealed it was more likely that women experienced occupational turnover due to their own decision or institutional decision [$\chi^2(3, N = 655) = 9.13, p = 0.03$] compared to men, although the association was only weakly associated (Cramer's $V = 0.12$). Interestingly retirement was given as the reason for organizational turnover for 93 coaches, yet when current occupational status at the time of data collection was obtained, only

76 remained retired. Therefore, some coaches ($n = 17$) either came out of retirement or didn't retire as the official press release stated.

Of the 146 coaches in this sample in which an Institutional Decision ended their tenure, a very small group ($n = 7$, 2 women, 5 men) were coaching the same level, conference status, and occupational role (i.e., NCAA D-I, Select 7 conferences, Head Coach). If fired, men were twice as likely to be employed at the same occupational level, status, and in the same role compared to women, although this was not a common occurrence (7 of 665, 1.1%) for any coaches in this sample who were fired.

Table 7

Longitudinal Distribution of Institutional Reason for Employee Turnover by Outgoing Coach Gender

Position	Women		Men		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Retired	27	10.5	66	16.2	93	14.0
Institutional Decision	64	24.8	82	20.1	146	22.0
Coach Decision	131	50.8	181	44.5	312	46.9
Others	36	14.0	78	19.2	114	17.1

Current Occupational Status of Outgoing Coaches

Frequency distributions were conducted to determine the current occupational status of outgoing coaches, and how many were currently coaching and at what level and position as of January 2021. Occupational status of some (44, $n = 16$ women, 28 men) coaches could not be found; some had retired (76, $n = 18$ women, 58 men), and two coaches (one male, one female) were deceased, and subsequently removed from analyses. The sample size used was ($N = 543$). For all coaches with a known occupational status, a majority (61.3%) were coaching at time of data collection at various competitive levels (Table 8). A gendered analysis revealed a larger percentage of men with a known occupational status (66.9%) were currently coaching compared to women (53.4%), and chi-square analysis revealed men were statistically more likely to be coaching than women [$\chi^2(1, N = 543) = 10.1, p = .001$].

Table 8*Current Occupational Status of Outgoing Head Coaches with Known Status by Gender*

Coach Gender	N	Coaching		Not Coaching	
		n	%	n	%
Female	223	119	53.4	104	46.6
Male	320	214	66.9	106	33.1
<i>TOTAL</i>	<i>543</i>	<i>333</i>	<i>61.3</i>	<i>210</i>	<i>38.7</i>

Current Competitive Level of Coaching

For coaches with known occupational status ($n = 333$) who were coaching at time of data collection, a majority were men (64.3%), and a majority of all coaches, men and women, coached at the NCAA D-I level (71.2%) (Table 9). The remainder coached across levels from youth to professional. Based on the data, eight coaches had moved 'up' to coach at the national team level—the only competitive level where women coached at a higher percentage (1.5%) than men (0.9%).

Table 9*Outgoing Coaches Who Are Currently Coaching by Competitive Level and Gender*

Competitive Level	Women		Men		Total	
	n	%	n	%	N	%
NCAA D-I	84	25.2	153	45.9	237	71.2
NCAA D-II	2	0.6	9	2.7	11	3.3
NCAA D-III	4	1.2	11	3.3	15	4.5
NAIA/JUCO	1	0.3	3	0.9	4	1.2
High School/Club/Youth	19	5.7	31	9.3	50	15.0
National Level	5	1.5	3	0.9	8	2.4
Professional/Semi Pro	4	1.2	4	1.2	8	2.4
<i>Total Sample</i>	<i>119</i>	<i>35.7</i>	<i>214</i>	<i>64.3</i>	<i>333</i>	<i>100</i>

Current Occupational Role and Level

Of those 333 coaches currently coaching across all competitive levels a majority (72.8%) were head coaches, and the remainder occupied associate, assistant, or volunteer coaching positions (See Table 10). Six were coaching as camp directors or listed as a generic 'coach' and were not included herein. Men outnumbered women at every position with the exception of associate head coach. Of those who continued to coach, a small percentage of all the original outgoing head coaches over eight years (96 of 665, 14.4%) remained head coaches at Select 7 institutions (Table 11). The rate at which men (9.3%) were currently employed as Select 7 head coaches was near double the rate compared to women (5.1%, $n = 34$) (Table 11). A small number ($n = 19$, 14 women, 5 men) of former head coaches transitioned into athletic administration, and 51 former coaches started their own business or sport camp (women = 24, 47.1%). While all the coaches in the sample started as head coaches of women's teams, after experiencing occupational turnover, over half of the men ($n = 36$) were coaching men either on men's teams or co-ed teams. No women ($n = 0$) were coaching on men's teams and very few ($n = 4$) were coaching co-ed teams (Table 12).

Table 10*Outgoing Coaches Currently Coaching at all Levels by Position and Gender*

Position	Women		Men		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Head Coach	83	25.4	155	47.4	238	72.8
Associate Head Coach	13	4.0	10	3.1	23	7.0
Assistant Coach	17	5.2	38	11.6	55	16.8
Volunteer Coach	4	1.2	7	2.1	11	3.4
<i>Total Sample</i>	<i>117</i>	<i>35.8</i>	<i>210</i>	<i>64.2</i>	<i>327</i>	<i>100</i>

Table 11
Outgoing Coaches Currently Coaching by Role, Level and Gender

	Women	Men	Total Number Coaching	Total Turnover Sample	Percent Coaching	Percent Women Coaching	Percent Men Coaching
	<i>n</i>	<i>n</i>	<i>n</i>	<i>N</i>	%	%	%
Current Coach	119	214	333	665	50.1	17.9	32.2
NCAA D-I Coach	84	153	237	665	35.6	12.6	23.0
Select 7 Coach	58	94	152	665	22.9	8.7	14.1
Select 7 Head Coach	34	62	96	665	14.4	5.1	9.3

Table 12

Outgoing Head Coaches Who Currently Hold Head Coaching Positions by Gender of Team by Head Coach Gender

Coach Gender	N	Female		Male		Male & Female	
		n	%	n	%	n	%
Female	34	30	88.2	0	0.00	4	11.8
Male	62	26	41.9	14	22.6	22	35.5
Total Sample	96	56	58.3	14	14.6	26	27.1

Discussion

The purpose of this study was to examine and document employee turnover patterns of head coaches of NCAA D-I women's teams to determine if gendered patterns existed, emerged, or were prevalent over time. Employee turnover encompassed both organizational (still coaching, but at different institution/organization) and occupational (no longer coaching) turnover. The purpose did not include examination of the experiences of coaches' occupational turnover, multilevel barriers or supports that influence turnover, career ambitions or career intentions—data that is well documented elsewhere. The actual occupational trajectories of head coaches at the most elite and well-paid level of intercollegiate women's sport were examined. The research questions guided the study and results will be illuminated in comparison to existing literature in detail below.

Overall, compared to the average employee turnover rate in the United States which hovers around 44% (U.S. Department of Labor, 2013-2021), head coaches of NCAA D-I institutions in Select 7 conferences have a *much lower average rate* (9%) of turnover by year and over time. This is perhaps both surprising and not surprising. Surprising because the employee turnover rate of sport coaches is significantly lower than other employee categories outside of the sport industry. It may not be surprising because these particular head coaching positions are some of the most well paid, resourced, visible, desirable, and powerful coaching positions in intercollegiate athletes, second only to head coaching positions on the men's side. Therefore, coaches who secure these coveted positions likely do not relinquish them unless they retire, leave for a more lucrative, prestigious, or desirable position, or their employment is terminated. The data indicates that a comparatively lower turnover rate means relatively lower employee turnover-related costs for athletic departments including program, recruiting, fundraising, attendance, and reputational continuity (Pierce et al., 2017; Ryan & Sagas, 2009). However, some athletic departments had above average turnover rates for all their coaches, and some particularly for women. For

example, at Houston women head coaches of women's teams comprised a small percentage (15%) of women but experienced occupational turnover at near double the rate (29%). Conversely, Oklahoma employed the most women over eight years (60%) yet observed zero women turnover. Inclusive and supportive workplaces are attractive to job seekers (Madera et al., 2018), and therefore organizational climate is a business imperative as well as crucial for recruiting new, and retaining existing, talent.

One of the greatest targets of opportunity to hire women is when men retire (LaVoi et al., 2019) and this data showed men are retiring but also illuminated that when men secure NCAA D-I Select 7 head coach position of women's teams, they are more likely to be older, be retained, choose to stay in coaching longer than women, and are therefore older when they retire. Existing data indicated that women coaches are younger and leave earlier than men (Cunningham & Sagas, 2003; Reade et al., 2009), and data in this study affirmed those findings—incoming and outgoing women head coaches were significantly younger than men. The low rate of occupational turnover in 2020-21 was not surprising given the volatile landscape of college sport due to COVID-19. Coaches were less likely to make career moves in an already uncertain job market, yet also more chose to retire in greater numbers than in past years.

Turnover rates did vary widely between sports, conferences, and institutions. It is imperative to examine employee turnover patterns by sport, institution, or conference over time.

For example, the University of Michigan can boast a low turnover rate compared to peer institutions. According to conventional wisdom, Equity in Athletics Disclosure Act (EADA) and publicly available salary data, it is known Michigan pays coaches well. Do high wages lead to stability and retention in coaching staff composition? Or is it the culture of the institution that keeps coaches staid? Additional insight into support factors that retain coaches would add greatly to understanding the current landscape of collegiate athletics. If institutions want to recruit and retain the best coaches *and* have a coaching staff for women's teams that resembles same identity role models for the athletes they serve, ADs would do well to understand why coaches accept or refuse job offers at their institution, and why coaches stay or leave instead of turning to trite and persistent blame the women narratives (Acosta & Carpenter, 1988; Kane & LaVoi, 2018; LaVoi, 2016). As evidenced by the data, some schools have higher rates of turnover than the average in the sample, and in turn ADs have the opportunity to hire numerous head coaches for women's teams. Job seekers should pay attention to the data trends.

The data is clear, institutions that experienced employee turnover of outgoing coaches of either gender, hired a male coach a majority of the time over eight years. Indeed, men replaced men most frequently, but notably women replaced by women was the second most common outcome followed closely by men replaced by women. The least likely outcome was a man replacing a woman coach which provides a small indication that eventually the trend may become to hire a majority of women for head coach positions of women's teams. Until hiring practices and trends change,

the underrepresentation of women head coaches will persist. Although the least likely outcome was a woman being replaced by a man, that alone is not sufficient to move the needle upward in any significant way. On average, the percentage of women head coaches in Select 7 institutions increased at a rate of 0.3% per year. At that dismally slow rate, it will take ~25 years to reach 50% and 159 years to reach pre-Title IX levels (over 90%) of women head coaches of women's teams for intercollegiate sport (Boucher et al., 2021). Each male coach hired is a missed opportunity by an AD to help move the needle upward, unstick the stagnation, and improve the occupational landscape for current and future women coaches.

Age and Gendered Employee Turnover Trends

Significant differences were observed between the ages of outgoing and incoming coaches and between male and female coaches. The average age of incoming women was significantly lower than incoming men. The age gap was most disparate when an incoming woman replaced an outgoing man. Entering a high-level and visible head coach position—which entails great levels of scrutiny and surveillance—at a younger age implies a possibility of having accrued less experience that may set women up for failure. Conversely as stated previously, if an older male retires, ADs may capitalize on retirement as an opportunity to hire an up-and-coming younger woman. Additional research is needed to determine ADs' perceived barriers to hiring younger women for head coaching positions, and the supports young women need throughout career stages and development to succeed and stay in the game (LaVoi & Boucher, 2021). What is the age range where the greatest number of women leave the coaching pipeline and what reasons do women give as to their departure? This knowledge can in turn help provide support, and inform resource allocation as well as policy development. Additional research is warranted.

Women also experienced employee turnover at a significantly younger age than the men in the sample. Based on the data women head coaches are hired at a significantly younger age, arguably with less experience than older incoming male coaches. Given that women face more barriers and are afforded less support than male colleagues due to the gendered system of sport that privileges men (Kane, 2016), women may be at risk for failure, burnout, or other negative psychosocial outcomes which causes them to leave coaching at a much younger age. For example, Cunningham and colleagues (2019) argued that significant age differences between female and male coaches may be the result of macro-level barriers of advancement, versus micro-level organizational factors. Macro-level barriers include discriminatory laws, cultural norms, and systemic bias (Cunningham et al., 2019; Kane, 2016; LaVoi & Dutove, 2012). Another study documented that women of color held coaching positions for less time (3 years on average) and took one year longer to reach a head coaching position than their white male peers (Larsen & Clayton, 2019). Future research and interventions should target macro-level issues with an intersectional lens, to improve rates of hiring and retention of all women coaches. Much work remains.

The Coaching Carousel

One narrative we sought to confirm or dispel pertained to the notion that women who are fired are less likely to be rehired than their male counterparts. What we found was men *are* more likely to obtain coaching positions than women. The most striking finding was men were twice as likely to be employed at the same level and position than were women, and this was also true when men were fired.

Institutionally Sanctioned Reasons for Employee Turnover

The most common reason for employee head coach turnover in this sample, based on institutional press releases, was attributed to coach autonomy—meaning the coach left voluntarily, resigned, or took another job. What this data did not capture is ‘the story behind the story’. Some coaches may be given the opportunity to resign, rather than be fired, therefore it is likely the prevalence of coach autonomous (voluntary) decision to leave was inflated by forced ultimatums. Data on employee turnover from the coach’s perspective is needed. The average rate of involuntary dismissal across industries is about 25% (U.S. Department of Labor, 2013-2021) and this sample was lower than that benchmark. Previous literature indicated a significant gender effect of coach turnover in that women had higher turnover intentions than men (Cunningham & Sagas, 2002; Cunningham et al., 2003; Cunningham & Sagas, 2007). The findings that women head coaches in this study voluntarily left at higher rates than men and several women transitioned into administrative roles or entrepreneurial ventures, raises further questions. Why are career pathways outside of coaching more appealing to some women? Why are women head coaches in lucrative positions choosing to leave for other careers? The answer to these questions holds practical wisdom for solving the stagnation and attrition problems for women coaches. More knowledge is needed to ascertain the factors behind the organizational cultures that retain women. Darvin (2020) found assistant female coaches voluntarily left for many interpersonal and occupational reasons but those reasons in this sample are unknown. Previous research documented the ‘push-pull’ of factors for coaches, such opportunity to earn a higher income (pull) or having school age children (push) as reasons behind voluntary separation (Wicker et al., 2018). In this study the reasons and factors behind voluntary separation were unknown. Future research is warranted.

Limitations and Future Directions

The current study while longitudinal, is quantitative and descriptive, and results only allow for viewing associations and patterns, not making causal conclusions. Future research should expand and include qualitative studies to determine 1) employee turnover from the perspective of the coach, including ascertaining reasons for voluntary separation; 2) in-depth case study analysis of athletic department culture; 3) examination of factors for migration of coaches to a non-coaching job; and 4) inclusion of additional intersectional identity factors, such as race and sexual orientation, in combination with age and gender to more fully understand occupational

turnover and resultant employment patterns of marginalized groups. Higher rates of employee turnover may suggest or point to a potential toxic, undesirable, or unsuitable work environment or sport culture—for all coaches, but particularly women. Similarly, a low turnover rate may signal a stable, supportive, well paying, well led, positive work environment and institutional culture where qualified and successful coaches remain. Future case study research in the organizational cultures of low- and high-rate turnover institutions is warranted as adding the perspective of coaches who stay at or leave an institution would provide additional insights.

Lastly, although some statistics regarding age variables were observed, the method of collecting age had limitations. For example, for coaches who had no record of their undergraduate degree or graduation date, their age variables could not be collected. Second, it is possible a coach who had a graduation date listed had attended that institution at a younger or older age. Future research examining age should utilize a more accurate method such as contacting coaches for their year of birth.

Conclusion

The goal of the current study was to add to existing literature pertaining to employee turnover of sport coaches through examination of longitudinal data of head coaches of women's teams in select NCAA Division-I conferences. Athletic departments and policy makers should use these insights to improve their coach hiring and retention practices.

The current study is the first of its kind, providing longitudinal data to help prove or dispel common narratives about women coaches and illuminate patterns of gender and discrimination. The average rate of head coach turnover of NCAA Division I Select 7 women's sport teams is lower than the average rate of employee turnover in the United States. Although encouraging for the entire coaching profession, discriminatory turnover patterns appear to be prevalent. Men in this sample were twice as likely as women to be coaching, regardless of the institutional reason for their departure. When men are fired, they have a greater likelihood to be rehired, especially at the same level and in the same role. Men are also afforded twice the opportunity, as they can in turn coach men, coed teams, or women, while women are excluded from coaching men. However true, these data reflect a small percentage of turnover occurrences in the dataset. Overall the data tell the story that very few coaches regardless of gender, who leave an NCAA D-I head coaching position for any reason, make a lateral move to a similar position. Data indicate that women are not more or less likely to be fired or rehired than their male counterparts. Although we found few instances of male coaches moving over to the men's teams, men currently and historically have had twice the opportunity to land a new coaching position, as they are considered for both men and women's coaching positions, while women are not provided those opportunities. Very few men and women exit and subsequently reenter the coaching carousel at this level of intercollegiate athletics, which provides one data point to counter the narrative that women are less likely to be rehired.

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