

Exploring the relationships among job attributes in sports organizations through meta-analytic approach in South Korea

Hyun-Duck Kim*
Keimyung University

Abstract

This meta-analytic review explores the relationships between job satisfaction, organizational commitment, and turnover intention in various sports organizations, in relation to moderating variables, including gender-ratios, types of sports organizations, and regional characteristics. Comprehensive Meta-Analysis (CMA) Version 2 was used to calculate the summary effect among the variables. Based on extracted correlation coefficients and standardized regression coefficients, we analyzed 85 effect sizes in 25,336 samples drawn from studies of sports organization employees and members. This study aims to better inform scholars and practitioners of ways to achieve higher levels of employee satisfaction and more positive organizational outcomes in sports settings.

Key words: Organizational commitment, Job satisfaction, Meta-analysis, Turnover intention, Employee-level job attributes, Gender Ratio, Regional characteristic

Introduction

Research exploring employee-level job attributes, such as job satisfaction, organizational commitment, and turnover intention, has been carried by researchers in various organizational management areas. Most of these studies have examined the psychological perceptions of members and employees of service-oriented sports organizations, reflecting the primary service encounters in sports settings (Cho & Kwon, 2015; Gray & Wilson, 2008; Han & Choi, 2007; Jung, 2014; Kim & Lough, 2009). Coaches, instructors, and trainers are among the primary employees of many sports organiza-

tions in Korea. Job satisfaction within various sports disciplines has been widely studied; it is acknowledged to be the main predictor of the psychological and affective status of employees and members in delivering assigned tasks. Employees of sports organizations are expected to deal with highly diverse stakeholder groups and clients; there is no doubt that their work involves a significant amount of stress. As consequence, retaining reliable employees and maintaining their commitment to organizations and occupations has become the top priority of sports organizations (Chelladurai & Ogasawara, 2003). Organizational commitment in sports organizations have been positively related to levels of retention. That is, job satisfaction is a key manifestation of organizational commitment (Chelladurai & Ogasawara, 2003). The general findings of a number of studies indicate that job satisfaction is negatively

associated with employee turnover intention in most sports organizations (Choi, Soo, Lim, & Kim, 2013; Chung, 2006; Kim, 2017; Kim & Cruz, 2016; Terranova & Henning, 2011). For instance, organizational level of job attributes such as commitment, satisfaction, and turnover intention have been most widely studied constructs within the domain of sports organizational theory (Cho & Kwon, 2015; Choi et al., 2013; Jung, 2014). However, focal focuses of previous studies in South Korea were heavily linked to verifying relationships among those job attributes and organizational tasks assigned to employees and members of sport organizations (Brief & Weiss, 2002; Choi, Song, & Park, 2012; Han, D.W., 2012; Kellison, Kim, & Magnusen, 2013; Kim & Jang, 2004). That is, very little is known about the influence of moderating variables—such as gender ratio, regional data characteristics, and types of sports organizations—on employee-level organizational outcome attributes (including job satisfaction, organizational commitment, and turnover intention) within sports settings. This study therefore aims to identify the effect sizes of study variables, while considering the influence of moderating variables. The following research questions have guided this meta-analytic review of relevant literature: (1) What are the effect-size (ES) estimate scores for the relationships between study variables? (2) Do differences exist in the effect-size (ES) estimates of relationships between study variables based on, (a) data gender ratios, (b) types of sports organizations, or (c) regional characteristics of data? Figure 1 presents the conceptual model for this meta-analytic review.

Literature Review

Among various perspectives on organizational change and dynamics, potential antecedents or the reactions of members to organizations with which they are officially involved have been widely accepted as employee-level attributes for organizational level outcomes (Kellison et al., 2013). Scholars and practitioners in the

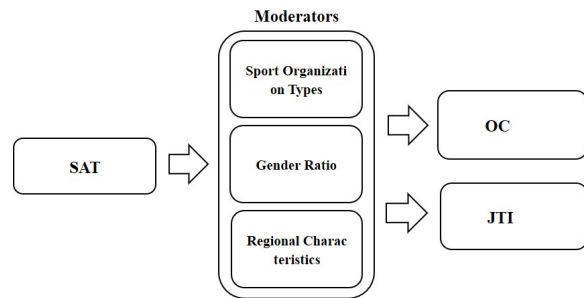


Figure 1. Conceptual model for the meta-analytic review

SAT = Job Satisfaction; OC = Organizational Commitment; JTI = Job Turnover Intention

global sports industry have attempted to better understand the factors that contribute to desirable outcomes at both the individual and organizational levels (Choi et al., 2012; Han, K.S., 2012; Kellison et al., 2013; Kim & Jang, 2004). Within the domain of organization theory, the issue of job satisfaction has generated a voluminous body of literature, becoming one of the issues most frequently studied to achieve organizational level outcomes. Brief and Weiss (2002) have described job satisfaction as, “an evaluative judgment about work as well as a work-related attitude with both affective (emotional) and cognitive components” (p. 64). Theoretical models that describe organizational outcomes generally invoke the concepts of job satisfaction and organizational commitment (Gray & Wilson, 2008). Such basic assumptions can also be applied to sports organizations, as a way of understanding the work-place psychological attitudes and attachment of staff members at various levels. Throughout the last decade, there has been an increase in the volume of scholarly publications on employee-level organizational outcome attributes (Choi et al., 2012; Han, K.S., 2012; Kellison et al., 2013; Kim & Jang, 2004; Won & Hur, 2017; Yoon & Kwak, 2009). In other words, job satisfaction, turnover intention, and organizational commitment have long been understood to be significant variables that affect employees’ psychological aptitude and attitudes to work (Bartlett & McKinney, 2004). The relationships between variables have shown relatively consistent pat-

terns in the findings of relevant studies. For instance, the relationship between job satisfaction and organizational commitment has generally been reported to be positive; by contrast, job satisfaction and turnover intention are negatively correlated across the studies (Bartlett & McKinney, 2004). Viewed in more detail, organizational commitment is comprised of three sub-dimensions: (1) continuance commitment, (2) affective commitment, and (3) normative commitment (Meyer & Allen, 1997). Turnover intention, the unexpected departure of employees leaving voluntarily, has always been a critical issue. Scholars and practitioners in the global sports industry have focused on ways of reducing the negative effects of turnover intention. In fact, overall performance and productivity have been essentially grounded in human resource management and practice for most sports organizations (including elite teams, commercial sports centers, and sports programs funded by government agencies).

Methodology

Selection of studies and the meta-analysis coding procedure

Every study that uses a meta-analysis as a statistical tool must begin by defining precise inclusion guidelines (Borenstein, Hedges, Higgins, & Rothstein, 2009; Hunter & Schmidt, 2000; Hunter & Schmidt, 2004). Using carefully defined guidelines enables researchers to systematically review and analyze critical findings in relation to particular academic topics (Kim & Cruz, 2016). From a theoretical standpoint, this statistical method is designed to provide a quantitative summary of the relevant literature, together with insights into the overall development of relevant studies (Higgins et al., 2003). To identify existing empirical studies published in the official Korean Citation Index, a search and selection procedure was carried out in two phases: (1)

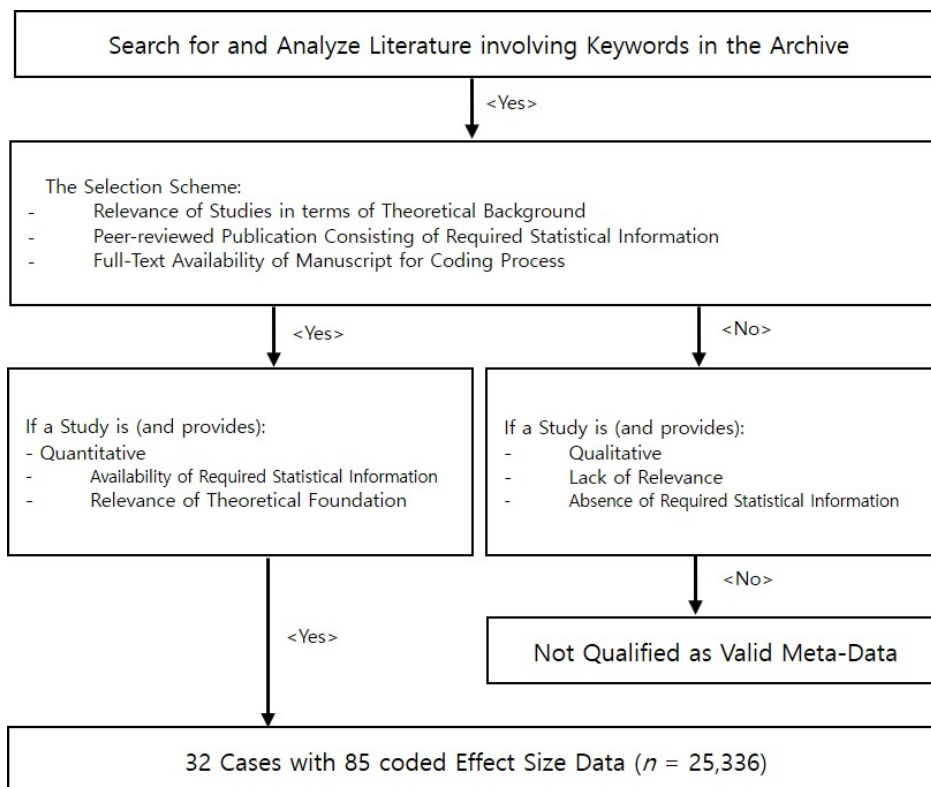


Figure 2. Selection scheme and coding procedure for the meta-analysis

choosing relevant academic journals using the following electronic databases: nanet.go.kr [National Assembly Library of the Republic of Korea], riss.kr, nl.go.kr [National Library of Korea], and Google Scholar, as approved by the Official Korean Citation Index; (2) providing an in-depth review of the literature related to the underlying study variables, while considering the study context, methodological procedures, theoretical background relevance, and (most importantly) applying statistical indexes. Although we did not limit the publication years, only studies within the context of the Korean sports industry were deemed acceptable.

The following inclusion guidelines were used to derive coding data for the moderating variables. The first moderator, gender, was divided into two different categories (“female high” and “male high”) to indicate the gender ratio of samples from each study. Second, the types of sports organizations and regional characteristics were verified, using the screening data from each study. A coding scheme was developed to reflect the fundamental purpose of this study. By conducting a systematic search of the relevant literature, we obtained 32 relevant studies that met the selection criteria described in the previous section (see Table 1). A total of 85 effect sizes, based on extracted correlation coefficients and standardized regression coefficients (i.e., beta scores in regression analyses) were analyzed for 25,336 samples drawn from the selected studies (coaches, instructors, and trainers). The selected studies included statistical information, such as (1) statistical summaries of sample demographics, (2) sample sizes, and (3) correlation coefficient and beta correlation coefficient scores from multiple regression analyses for the variables (Peterson & Brown, 2005).

The effect-size estimate used in this meta-analysis was based on r , a correlation coefficient estimate converted into Fisher’s z -transformed correlation coefficients. Comprehensive Meta-Analysis (CMA) Version 2 was used to calculate the summary effect among the variables (Borenstein et al., 2009). Based on suggestions from Hunter and Schmidt (2000), the Q statis-

tic and I^2 index were estimated to assess the heterogeneity of the coded data to determine the relationships among study variables, which included satisfaction, organizational commitment, and job turnover intention. Verifying heterogeneity is an initial step of meta-analysis in order to verify the dispersion of effect size data (Hunter & Schmidt, 2000). All I^2 indexes exceed 75% as reported in Table 2 and indicated the existence of comparable heterogeneity throughout the effect size indexes as recommended by Higgins, Thompson, Deeks, and Altman (2003). As is generally case in more meta-analysis procedure, funnel plot was utilized to verify the possibility of publication bias (Figure 3) as suggested by Borenstein et al. (2009). In the funnel plot analysis, the points were scattered symmetrically and centrally. Therefore, no publication bias was detected for the estimated effects.

For the judgment of summary effects, the estimated variability of each meta-analysis result was observed by estimating the confidence intervals of effect sizes. According to Cohen (1988), random effect models of .10, .30, and .50 should be interpreted as small, medium, and large, regardless of their respective directions. Additionally, by subjectively screening the results of funnel plot analysis, no publication bias for the coded studies were detected in this case.

Results

As an initial step in the meta-analysis process, it is critical to assess heterogeneity to determine the variability of the data for further meta-analysis (Higgins et al., 2003; ; Hunter & Schmidt, 2000; Kim & Cruz, 2016; Jung & Kang, 2013). Providing more detail, I^2 index metrics can reveal the existence of heterogeneity throughout the ES indexes, producing comparatively high heterogeneity results ($I^2 = 95.153 \sim 96.393$), based on Hunter and Schmidt’s (2000) criteria. With respect to the overall effects among underlying study interests, satisfaction was positively associated with organizational commitment (95% CI = [0.368, 0.435], ES =

Table 1. Selected articles on employee level job attributes in sports organizations

#	Author	Year	Gender	<i>n</i>	Org.	Data Region
1	Cho, M. J. & Kwon, M. H.	2015	ML	266	TKD	Seoul Metropolitan Area
2	Choi, B. A. et al.	2012	ML	394	EST	NS
3	Choi, K. K. et al.	2013	ML	202	EST	Seoul Metropolitan Area
4	Choi, W. O.	2012	FH	389	CSB	Chungcheong Provinces
5	Chung, Y. L.	2006	MH	215	CSB	Chungcheong Provinces
6	Chung, Y. R.	2014	MH	297	CSB	Seoul Metropolitan Area
7	Ham, D. W.	2012	MH	251	EST	NS
8	Han, K. S.	2012	MH	215	TKD	Seoul Metropolitan Area
9	Han, S. R. & Choi, J. D.	2007	MH	432	EST	Gangwon Provinces
10	Hong, M. H.	2012	FH	242	SAP	Seoul Metropolitan Area
11	Jang, J. O. & Kim, I. J.	2008	MH	428	TKD	NS
12	Jung, H. Y.	2014	MH	229	EST	NS
13	Jung, K. D. & Kang, D. O.	2013	MH	242	SAP	Chungcheong Provinces
14	Kim, D. H.	2016	MH	370	TKD	Seoul Metropolitan Area
15	Kim, D. H.	2016	MH	268	TKD	Seoul Metropolitan Area
16	Kim, D. H.	2017	MH	235	TKD	Seoul Metropolitan Area
17	Kim, I. H. et al.	2007	MH	292	EST	NS
18	Kim, J. K.	2013	MH	286	TKD	Gyeongsang Provinces
19	Kim, S. I.	2011	MH	228	SAP	Seoul Metropolitan Area
20	Kim, T. H. & Jang, K. R.	2004	MH	244	CSB	Seoul Metropolitan Area
21	Kwack, J. H.	2013	MH	198	TKD	Seoul Metropolitan Area
22	Lee, B. E. & Lee, S. Y.	2007	MH	212	CSB	Seoul Metropolitan Area
23	Lee, J. H.	2011	MH	212	EST	Seoul Metropolitan Area
24	Lim, J. G.	2010	MH	227	TKD	Seoul Metropolitan Area
25	Lee, J. T.	2015	MH	182	SAP	NS
26	Lim, S. H. et al.	2011	MH	347	TKD	NS
27	Lim, W. T. et al.	2009	FH	483	SAP	Seoul Metropolitan Area
28.	Park, M. S. & Bae, S. W.	2013	MH	167	SAP	Jeollado/Gyeongsang
29	Park, S. B.	2012	MH	295	TKD	Seoul Metropolitan Area
30	Won, S. J. & Hur, J.	2017	MH	288	TKD	Seoul Metropolitan Area
31	Yeon, E. J. & Chun, B. K.	2017	FH	352	SAP	Seoul Metropolitan Area
32	Yoon, O. N. & Kwak, B. H.	2009	MH	177	TKD	NS

FH=Data composed of High Female Ratio; MH=Data composed of High Male Ratio; NS=Not specified; Org.=Type of Organization; TKD=Taekwondo Center; CSB=Commercial Sport Centers; SAP=Sports for All Programs funded by the Government; EST = Elite Sport Team

.298, $p < .05$) and the effect size was interpreted as moderate in accordance with Borenstein et al.'s (2005) criteria. Satisfaction was negatively associated with job turnover intention (95% CI = [-0.180, -0.082], ES = -0.275, $p < .05$), as supported by the selected studies (Table 2).

To further examine the relationship between satisfaction and both organizational commitment and job turnover intention, the present study adopted gender ratio (the gender ratio of data for each study), type of sports organization (taekwondo, commercial sports centers, government-funded sports programs, and elite sports teams), and geographical location (data collection sites) as the moderators for this meta-analysis.

In assessing the effect sizes of the relationship between satisfaction and organizational commitment, the

sample ratio of the female-high group was considered large (95% CI = [0.492, 0.660], ES = 0.582, $p < .05$)—higher than that of the male-high group (95% CI = [0.292, 0.431], ES = 0.364, $p < .05$). However, it is important to note that only one study was coded for the female-high group in this analysis. For effect-size estimates of the relationship between satisfaction and job turnover intention, both the female-high group (95% CI = [-0.260, -0.046], ES = -0.155, $p < .05$) and the male-high groups (95% CI = [-0.316, -0.053], ES = -0.188, $p < .05$) had negative effect-size scores; those effect sizes were considered of small relevance in this case (see Table 3).

Table 4 presents the effect-size estimates of the relationships between underlying variables, based on regional characteristics. The selected studies were cat-

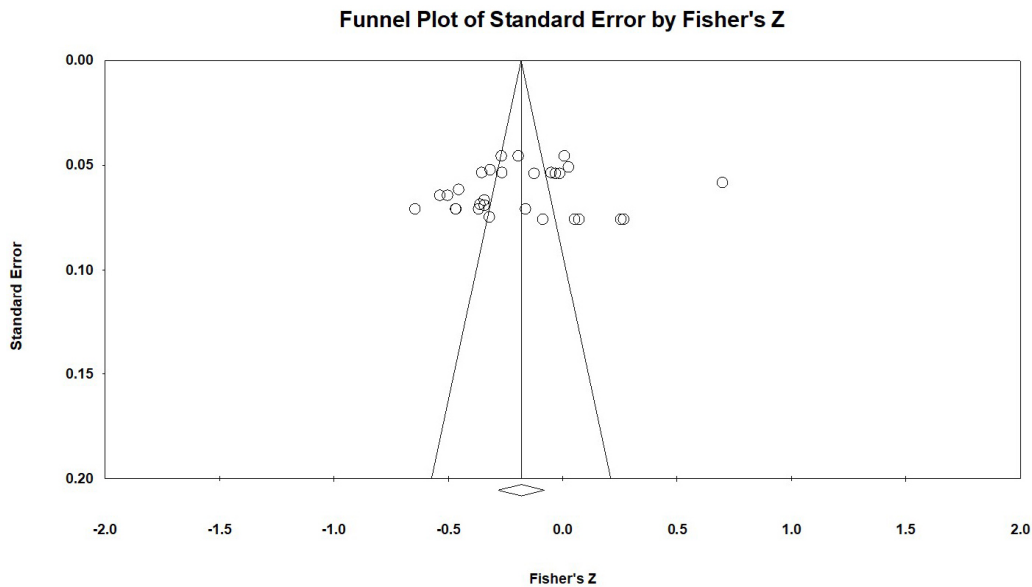


Figure 3. Funnel plot of standard error using the coded effect size data

Table 2. Overall effect sizes of the relationship between SAT, OC, and JTI

Variable	<i>k</i>	<i>Q</i>	<i>p</i>	-95 % CI	ES	+95 % CI	<i>I</i> ²	<i>SE</i>
OC	56	1524.526	<.05	.368	.298	.435	96.393	.018
JTI	29	577.673	<.05	-0.180	-0.275	-0.082	95.153	.021

k = number of correlations; *Q* = homogeneity statistic; CI = confidence intervals; ES = weighted fixed effect size; SE = standard error; OC = Organizational Commitment; JTI = Job Turnover Intention

egorized into two different groups, “Seoul-metropolitan” and “other city/province,” after screening the geographical locations where data were collected. Further analysis of the effect-size estimate of the relationship between satisfaction and organizational commitment indicated that the effect-size scores of other cities/provinces (95 % CI = [0.380, 0.533], ES = 0.460, $p < .05$) were large and higher than those that of Seoul/metropolitan areas (95 % CI = [0.168, 0.386], ES = 0.281, $p < .05$). In the relationship between satisfaction and job turnover intention, satisfaction was negatively associated with job turnover intention. The effect-size score of Seoul-metropolitan area (95 % CI = [0.168, 0.386], ES = 0.281, $p < .05$) was relevantly (negatively) higher than that of other city/province (95 % CI = [0.168, 0.386], ES = 0.281, $p < .05$).

Table 5 presents a summary of the effect-size estimates of the relationships based on sports organiza-

tion types. Further analysis of the relationship between satisfaction and organizational commitment found that the group of sports (95 % CI = [0.433, 0.585], ES = 0.513, $p < .05$) for all programs had the strongest relationship with organizational commitment followed by elite sports teams (95 % CI = [0.380, 0.552], ES = 0.470, $p < .05$), commercial sports centers (95 % CI = [0.326, 0.450], ES = 0.390, $p < .05$) and Taekwondo centers (95 % CI = [0.031, 0.346], ES = 0.194, $p < .05$). The effect-size scores ranged from .194 to .513, indicating moderate to very high effects. For the effect-size estimates of satisfaction and turnover intention, the commercial sports center group (95 % CI = [-0.529, -0.311], ES = -0.133, $p < .05$) had the most negative effect-size score, followed by elite sports teams (95 % CI = [-0.490, -0.272], ES = -0.387, $p < .05$), sports for all programs funded by governmental agencies (95 % CI = [-0.305, -0.122], ES = -0.215, $p < .05$), and tae-

Table 3. Effect sizes for SAT, OC, and JTI, based on a gender ratio

Moderator	Category	Comparison	<i>k</i>	-95 % CI	ES	+95 % CI	<i>p</i>	<i>Q</i>	<i>I</i> ²	<i>SE</i>
Gender Ratio	SAT and OC	FH	1	0.492	0.582	0.660	0.000	0.000	0.000	0.000
		MH	55	0.292	0.364	0.431	0.000	1510.709	96.426	0.019
	SAT and JTI	FH	7	-0.260	-0.155	-0.046	0.000	53.886	88.865	0.013
		MH	22	-0.316	-0.188	-0.053	0.006	522.110	95.978	0.034

k = number of correlations; *Q* = homogeneity statistic; CI = confidence intervals; ES = weighted fixed effect size; SE = standard error; OC = Organizational Commitment; JTI = Job Turnover Intention; FH = Data composed of high female sample ratio; MH = Data composed of high male sample ratio.

Table 4. Effect sizes estimates for SAT, OC, and JTI based on regional characteristics

Moderator	Category	Location	<i>k</i>	-95 % CI	ES	+95 % CI	<i>p</i>	<i>Q</i>	<i>I</i> ²	<i>SE</i>
Regional Characteristics	SAT and OC	Seoul/metropolitan Area	30	0.168	0.281	0.386	.000	718.323	95.963	.029
		Other cities	26	0.380	0.460	0.533	.000	630.784	96.037	.019
	SAT and JTI	Seoul/metropolitan Area	19	-0.389	-0.274	-0.152	.000	424.149	95.756	.028
		Other cities	10	-0.087	0.008	0.102	.873	50.606	82.216	.011

k = number of correlations; *Q* = homogeneity statistic; CI = confidence intervals; ES = weighted fixed effect size; SE = standard error; SAT = Instructor Satisfaction; OC = Organizational Commitment; JTI = Job Turnover Intention.

Table 5. Effect size estimates for SAT, OC, and JTI, based on types of sport organizations

Moderator	Category	Org.	<i>k</i>	-95 % CI	ES	+95 % CI	<i>p</i>	<i>Q</i>	<i>I</i> ²	<i>SE</i>
Sports Orgs. Types	SAT and OC	SAP	3	0.433	0.513	0.585	.000	3.515	43.099	0.008
		EST	22	0.380	0.470	0.552	0.000	606.595	96.538	0.022
		CSB	12	0.326	0.390	0.450	0.000	40.917	73.117	0.007
		TKD	19	0.031	0.194	0.346	.000	582.775	96.911	0.046
	SAT and JTI	CST	5	-0.529	-0.133	-0.311	0.564	292.792	98.634	0.194
		EST	6	-0.490	-0.387	-0.272	.000	25.869	80.672	0.016
		SAP	8	-0.305	-0.215	-0.122	0.000	47.503	85.264	0.010
		TKD	10	-0.176	-0.041	0.095	0.553	107.916	91.660	0.024

k = number of correlations; *Q* = homogeneity statistic; CI = confidence intervals; ES = weighted fixed effect size; SE = standard error; OC = Organizational Commitment; JTI = Job Turnover Intention; Org. = Type of Organization; TKD = Taekwondo Center; CSB = Commercial Sport Centers; SAP = Sports for All Programs funded by the Government; EST = Elite Sport Teams.

kwondo centers (95 % CI = [-0.176, 0.095], ES = -0.041, *p* < .05).

Discussion

The present meta-analytic review has systematically analyzed the correlation coefficient scores relating to employee-level attributes (job satisfaction, organizational commitment, and turnover intention) presented in the KCI-indexed Korean literature. In sports organizations, employee roles were critical, constituting the most important factor in achieving organizational efficiency and success. This study offers insights into the influence of moderating variables on the study variables. Our initial literature search resulted in 32 studies published within the domain of sports science and industry (in sports association/agency journals), with a combined sample size of 25,336. This study’s findings on the influence of moderating variables are interesting and new to scholars and practitioners in the Korean sports industry. As expected, the overall effect size of the relationship between satisfaction and organizational commitment was positive, achieving a “medium” level rating. A survey of gender ratios in the selected studies

and the effect-size estimate of the relationship revealed that the female-high group had a higher effect-size score than the male-high group. This finding is in line with previous studies (Choi, 2012; Chung, 2006; Han & Choi, 2007; Ham, 2012; Hong, 2012; Park & Bae, 2013). In other words, much research supports the argument that female employees tend to show higher levels of satisfaction and a stronger commitment to work-related outcomes (Curry, McCarragher, & Dellmann-Jenkins, 2005; Giffords, 2009; Wiener, Squillace, Anderson, & Khatutsky, 2009). By contrast, only a slight difference was observed in the effect-size estimate score for the relationship between satisfaction and job turnover intention, based on gender (the male-high group had a higher negative effect-size score). Men are the largest group in most sports organizations and hold more tenured employment positions than women. Moreover, men tend to remain in their jobs for longer periods of time (Barak, Lizano, Kim, Duan, Rhee, Hsiao, & Brimhall, 2016).

The effect-size estimates of the relationship between satisfaction and organizational commitment, based on regional characteristics, indicate that employees working in places other than Seoul and metropolitan areas

tend to show more positive outcomes. Differences in the estimation scores were noticeable. According to Birdseye and Hill (1995), the factor that plays the most significant role in employee satisfaction and rates of turnover intention is the “cost of living” in the area in which an employee carries out work-related tasks. As cost of living increases, turnover intention becomes a viable option in most cases. In other words, although most studies describe the relationship between job satisfaction and turnover intention as negative, the reasons they give are heterogeneous. This inferential statistic-based study has not attempted to verify the range of reasons, which are beyond its scope. However, this finding suggests that efforts to maintain an inclusive workplace environment for both genders and to diagnose potential causes of turnover intention are important in achieving positive organizational outcomes. Employees working in the sports for all programs appeared to be more satisfied and committed than employees of other sports organizations. The difference in the effect-size estimate score was relatively high between the sports for all programs and taekwondo centers. One possible explanation for this finding is that the competition among taekwondo centers has intensified heavily, due to the difficult market situation facing this sport. Salaries and other compensation and incentive programs for employees at taekwondo centers have been falling steadily (Lim, Lee, & Park, 2011). To improve organizational effectiveness, it should be noted that employees who feel more committed and satisfied are likely to remain longer in their positions; they also tend to be more productive (Barak et al., 2016; Hwang & Hopkins, 2012). To cultivate more inclusive organizational practices that can help sports organizations minimize turnover intention, decision-makers in sports organizations should foster visions, policies, and practices that aim to comprehend the individual characteristics of their employees and members and to encourage and appreciate their contributions (Barak et al., 2016; Leonardelli & Toh, 2011).

Conclusion and Limitations

This meta-analysis was undertaken to examine the influence of moderating variables (i.e., gender ratio, regional data characteristics, and types of sports organizations) on employee-level organizational outcome attributes (i.e., job satisfaction, organizational commitment, and turnover intention) within Korean sports settings. Collectively, the findings of this study provide a foundation for understanding the moderating effects of gender ratios, regional characteristics, and organizational types on variables that affect organizational performance and outcome. This meta-analytic review of selected studies provides a comprehensive summary and description of mainstream studies within a certain theoretical concept. This study provides insights into the potential differences in relationships among variables. It can thus help scholars and practitioners become better informed about ways to achieve higher levels of employee satisfaction and commitment within sports organizations. Although this study is unique and offers benefits to various audiences, it also has the following limitations, given the nature of meta-analytic methodology: (1) only Korean articles published in KCI-indexed sports-oriented journals have been included; (2) researchers have relied on their subjective judgments to categorize the selected studies; (3) theoretically relevant studies may have been excluded because they lacked relevant statistical information. Despite the author’s every effort to synthesize more precise estimates of population effect sizes for an underlying theoretical background, this study may not reflect a broad spectrum of studies. Future research could explore additional moderating factors more broadly to further develop our knowledge of employee-level attributes and their mechanisms.

Conflict of Interests

There are no conflicts of interest to declare. This re-

search did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

(References marked with an asterisk indicate studies included in the meta-analysis)

- Barak, M. E., Lizano, E. L., Kim, A., Duan, L., Rhee, M. K., Hsiao, H. Y., and Brimhall, K. (2016). The promise of diversity management for climate of inclusion: A state of the art review and meta-analysis. *Human Service Organizations: Management, Leadership & Governance*, **40**(4), 305–333.
- Bartlett, K. R., & McKinney, W. R. (2004). A study of the role of professional development, job attitudes, and turnover among public park and recreation employees. *Journal of Park and Recreation Administration*, **22**(4), 62-80.
- Birdseye, M. G., & Hill, J. S. (1995). Individual, organizational/work and environmental influences on expatriate turnover tendencies: An empirical study. *Journal of International Business Studies*, **26**(4), 787-813.
- Borenstein, M., Hedges, L.V., Higgins, J. P. T., & Rothstein, H. R. (2009), *Introduction to meta-analysis*, Wiley, London.
- Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Effect in the workplace. *Annual Review of Psychology*, **53**, 279-307.
- Chelladurai, P., & Ogasawara, E. (2003). Satisfaction and commitment of American and Japanese collegiate coaches. *Journal of Sport Management*, **17**(1), 62-73.
- *Cho, M. J., & Kwon, M. H. (2015). Research on the structural relation of organizational justice, emotional exhaustion, job satisfaction and turnover intention for taekwondo instructor. *Journal of Sport and Leisure Studies*, **62**, 713-725.
- *Choi, B. A., Song, S. S., & Park, D. S. (2012). The effect of organizational justice on work satisfaction, organization commitment youth sports club recognition. *The Korean Journal of Sport*, **10**(4), 161-172.
- *Choi, K. K., Soo, K. I, Lim, S. J., & Kim, D. S. (2013). The influence of job stress of the youth sports club instructor on job satisfaction and job turnover. *Korea Journal of Sports Science*, **22**(2), 529-539.
- *Choi, W. O. (2012). The relationship between characteristics of sports centers coaches, organizational commitment, job satisfaction, and turnover intention. *The Korean Journal of Sport*, **10**(1), 143-155.
- *Chung, Y. L. (2006). The SEM analysis of the employees' turnover intention in the commercial sports facilities, *Korean Journal of Sociology of Sport*, **19**(3), 427-440.
- *Chung, Y. R. (2014). A study of relationship among transformational leadership, LMX, and job attitude of sports instructors at sports centers. *The Korean Journal of Physical Education*, **53**(3), 389-400.
- Cohen, J. (1988). *Statistical power for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Curry, D., McCarragher, T., & Dellmann-Jenkins, M. (2005). Training, transfer, and turnover: Exploring the relationship among transfer of learning factors and staff retention in child welfare. *Children and Youth Services Review*, **27**, 931-948.
- Giffords, E. D. (2009). An examination of organizational commitment and professional commitment and the relationship to work environment, demographic and organizational factors. *Journal of Social Work*, **9**, 386-404.
- Gray, C. E., & Wilson, P. M. (2008). The relationship between organizational commitment, perceived relatedness, and intentions to continue in Canadian track and field officials. *Journal of Sport Behavior*, **31**(1), 44-63.
- *Ham, D. W. (2012). The structural analysis of leader's job characteristics, empowerment, job satisfaction and organizational commitment in water leisure sports. *The Korean Journal of Sport*, **10**(1), 77-90.

- *Han, K.S. (2012). The effect of self-leadership on job satisfaction and organizational commitment of taekwondo master. *Journal of Sport and Leisure Studies*, **48**, 119-128.
- *Han, S. R., & Choi, J. D. (2007). Possible effects of physical education directors' job characteristics upon job satisfaction and organizational commitment. *Korean Journal of Sport Management*, **12** (2), 1-16.
- *Hong, M. H. (2012). The relationship between professionalism and job characteristics of silver-fitness dance instructors and organizational effectiveness. *Journal of Leisure and Recreation Studies*, **36**(4), 13-24.
- Higgins, J. P. T., Thompson, S. G., Deeks, J. J., & Altman, D. G. (2003), Measuring inconsistency in meta-analyses, *British Medical Journal*, **327** (7414), 557-560.
- Hunter, J. E., & Schmidt, F. L. (2000), Fixed effects vs random effects meta-analysis models: Implications for cumulative research knowledge. *International Journal of Selection and Assessment*, **8**(4) 275-292.
- Hunter, J. E., & Schmidt, F. L. (2004), *Methods of meta-analysis: correcting error and bias in research findings* (2nd ed.), Sage, Thousand Oaks, CA.
- Hwang, J., & Hopkins, K. (2012). Organizational inclusion, commitment, and turnover among child welfare workers: A multilevel mediation analysis. *Administration in Social Work*, **36**, 23-39.
- *Jang, J. O., & Kim, I. J. (2008). The effect which the leadership of taekwondo coach has taken on the athlete mentoring and the achievement of team. *Korean Journal of Sport Management*, **13**(4), 191-208.
- *Jung, H. Y. (2014). The relationship among organizational trust, job satisfaction, organizational flow, and organizational performance and the moderation effect of career in school sports coaches. *Journal of Sport and Leisure Studies*, **58**, 367-380.
- *Jung, K. H., & Kang, D. O. (2013). Structural relationship among sports for all coaches' emotional intelligence, job satisfaction, organizational commitment and organizational citizenship behavior. *The Korean Journal of Sport*, **11**(3), 193-205.
- *Kim, D. H. (2016). Effects of job embeddedness, and organizational commitment on the job satisfaction of taekwondo instructors. *Korea Journal of Sports Science*, **25**(2), 225-236.
- *Kim, D. H. (2016). The effect of taekwondo instructor's professionalism on the job satisfaction and turnover intention. *Korea Journal of Sports Science*, **25**(3), 557-568.
- *Kim, D. H. (2017). A study on the effects of self-leadership on organizational commitment and job satisfaction of taekwondo instructors. *The Journal of Korean Alliance of Martial Arts*, **19**(3), 73-86.
- Kim, H. D., & Cruz, A. B. (2016), The influence of coaches' leadership styles on athletes' satisfaction and team cohesion: A meta-analytic approach, *International Journal of Sports Science and Coaching*, **11**(6), 900-909.
- Kim, H. D., & Lough, N. L. (2009), Measurement of service quality in the sports industry: consideration of the assessment, selection and adoption, *International Journal of Sport Management*, **10**(4), 436-449.
- *Kim, I. H., Jeong, S. K., Shin, S. Y., & Choi, J. J. (2007). The effect of transformational and transactional leadership for shooting coaches on organizational commitment and job satisfaction. *Korea Journal of Sports Science*, **16**(4), 137-146.
- *Kim, J. K. (2013). The moderating effect of organization trust toward the influence of organization culture on taekwondo organization effectiveness. *Korea Society for Martial Arts*, **7**(2), 49-66.
- *Kim, S. I. (2011). The relationship between emotional labor, job burnout, job satisfaction and turnover intention in life sports instructors. *Korean Journal of Physical Education*, **50**(3), 333-344.
- *Kim, T. H., & Jang, K. R. (2004). Relationship between organizational citizenship behaviors and

- attitudinal variables of employees in sports organizations. *Korean Journal of Sport Science*, **15**(4), 155-171.
- *Kwak, J. H. (2013). The effect of job identify and professional recognition of taekwondo masters on the job satisfaction and job commitment. *Korea Journal of Sports Science*, **22**(5), 549-565.
- Kellison, T. B., Kim, Y. K., & Magnusen, M. J. (2013). The work attitudes of millennials in collegiate recreational sports. *Journal of Park and Recreation Administration*, **31**(1), 44-63.
- *Lee, B. E., & Lee, S. Y. (2007). An effect of self-esteem on organizational effectiveness in sports centers instructor. *Journal of Coaching Development*, **9**(2), 441-450.
- *Lee, J. H. (2011). The relationship between organization culture, job stress, job satisfaction, and turnover intention in elite sports leaders. *Journal of Coaching Development*, **13**(1), 95-104.
- *Lee, J. T. (2015). The effect of the emotional labor of recreation leaders on job satisfaction and turnover intention. *Korea Journal of Sports Science*, **24**(3), 293-303.
- Leonardelli, G. J., & Toh, S. M. (2011). Perceiving expatriate coworkers as foreigners encourages aid: Social categorization and procedural justice together improve intergroup cooperation. *Psychological Science*, **22**(1), 110-117.
- *Lim, J. G. (2010). Study on the difference of job satisfactory level between middle school tae-kwon-do instructors. *Korea Journal of Sports Science*, **19**(4), 143-153.
- *Lim, S. H., Lee, Y. C., & Park, S. S. (2011). The causal relationship among taekwondo master's job stress, job satisfaction and turnover intention. *The Journal of Korean Alliance of Martial Arts*, **13**(1), 199-133.
- *Lim, W. T., Lee, H., & Lee, J. H. (2009). The influence of empowerment and job satisfaction on turnover intention in life sports instructors. *Journal of Sport and Leisure Studies*, **36**, 187-200.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace*. Sage Publications.
- *Park, M. S., & Bae, S. W. (2013). Structural relationship among sports for life time sports instructors' job satisfaction, organizational commitment, and innovative behavior. *Korea Journal of Sports Science*, **22**(2), 589-601.
- *Park, S. B. (2012). The effect of wage satisfaction on the job satisfaction and organizational commitment of taekwondo instructors. *The Journal of Korean Alliance of Martial Arts*, **14**(3), 57-68.
- Peterson, R. A. & Brown, S. P. (2005). On the use of beta coefficients in meta-analysis. *Journal of Applied Psychology*, **90**(1), 175-181.
- Terranova, A. B., & Henning, J. M. (2011). National collegiate athletic association division and primary job title of athletic trainers and their job satisfaction or intention to leave athletic training. *Journal of Athletic Training*, **46**(3), 312-318.
- Wiener, J. M., Squillace, M. R., Anderson, W. L., & Khatutsky, G. (2009). Why do they stay? Job tenure among certified nursing assistants in nursing homes. *Gerontologist*, **49**, 198-210.
- *Won, S. J., & Hur, J. (2017). The effect of psychological contract on job satisfaction, organizational commitment, and organizational citizenship behavior of taekwondo instructors. *Korea Journal of Sports Science*, **26**(4), 623-637.
- *Yeon, E. J., & Chun, B. K. (2017). The influence of job choice motivation on job satisfaction and turnover intention of aerobic dance instructor. *Korea Journal of Sports Science*, **26**(6), 417-428.
- *Yoon, O. N., & Kwak, B. H. (2009). Differences analysis of duty and intention of charging occupation by personal characteristic of taekwondo masters. *Korean Journal of Sport Management*, **14**(1), 119-129.