

2013 Pyeongchang Special Olympics World Winter Games Constituent Satisfaction Study Report



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Sport Industry Marketing Center

Hanyang University

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1. Scope of Work:

To create and implement a Constituent Satisfaction Survey at the 2013 World Winter Games in Pyeongchang and Gangneung, South Korea. Constituent Surveys for 12 different constituencies were developed for interviews on-site at the 2013 World Winter Games. Data collected were aggregated and reported back to Special Olympics International within 1 month of completion of the Games.

2. Key dates:

First draft Survey - November 15, 2012

Final Survey Development - December 31, 2012

Data Collection - Jan 27 - Feb 6, 2013

Aggregated Data & Summary Report Due - March 5, 2013

3. Survey Design

A cross sectional descriptive study was utilized to examine the state of satisfaction of the 12 constituent groups toward the 2013 Pyeongchang Special Olympics Winter Games held in South Korea from January 29 to February 5th, 2013. The convenience sample was comprised of individuals attending the 2013 World Winter Games' competition and non-competition events and who belonged to one of the following 12 constituent groups: **a) Athletes; b) Coaches; C) Head of Delegation; d) Torch Relay Runners; e) VVIP ("Honored Guests"); f) Officials; g) Youth Summit Group; h) Sponsors; i) Family; j) Volunteers; k) Media; l) Healthy Athlete professionals.**

A convenience sample of more than 12,100 census from 113 countries around the globe participated in the 2013 Special Olympics World Games and a total of **599 surveys** were returned (incl. ones with missing data). All data were collected by graduate students majoring in Sport Management at Hanyang University in Seoul, Korea during the 2013 Winter Games via 1-on-1 interview and/or street intercept method.

The survey instrument was developed by the researchers and measured various components of (1) Satisfaction, (2) Constituent-specific questions, and (3) Demographic questions, with a 5-point Likert scale (e.g. 1 = Very unsatisfied to 5 = Very satisfied for Satisfaction component) where appropriate. The researchers worked closely and multiple times with SOI to ensure that the information being sought were clearly asked via survey instruments and reached agreement between the two parties prior to the data collection. Furthermore, previous questionnaires conducted by SOI in the previous Games were partially built into these instruments as requested and reviewed by SOI.

All data were managed and analyzed with SPSS 20.0 (Windows). Data were first examined to address missing, duplicate, incomplete data, or outliers, and to determine normality of the data distribution. Descriptive statistics were computed to characterize the data distribution with means, median, frequencies, proportions, and graphs (histogram) for all variables. For satisfaction components, exploratory factor analysis and reliability analysis were used to examine the structures and reliability of components. Then, univariate statistics were used to examine the relationships among the demographics and psychometric measures. The statistical methods included independent samples t-test and one-way Analysis of Variance (ANOVA). A level of significance of .05 was used for all analyses unless adjusted for post-hoc comparisons.

4. Data Summary

Note: Missing data on some returned yet incomplete surveys cause the total tally to fluctuate from constituent to constituent.

I. Demographic Information

1. Gender

Gender	N (%)
Male	259 (43.7%)
Female	334 (55.9%)
Total	593 (100%)

2. Constituent Group

Constituent Group	N (%)
Athletes	114 (19.5%)
Coaches	30 (5.0%)
Head of Delegation	9 (1.5%)
Torch Run Participants	7 (1.2%)
Honored Guests	44 (7.4%)
Officials	17 (2.8%)
Youth Summit Groups	23 (3.8%)
Sponsors	3 (0.5%)
Family	54 (9.2%)
Volunteers	236 (40.4%)
Media	34 (5.8%)
Healthy Athlete Professionals	13 (2.2%)
Total	584 (100.0%)

* Others included: Law Enforcement Officers, Torch Run support staff, Global scholars, Chaperones, Global messenger, Research delegation.

3. Age: Mean of **30.54** (SE = 0.62) * SE: Standard Error +/- 0.62

4. Education

Education	N (%)
In high school now	54 (10.0%)
High school graduate	61 (11.3%)
In college now	214 (39.8%)
College graduate	116 (21.6%)
Advanced degree	93 (17.3%)
Total	538 (100.0%)

5. Ethnicity

Ethnicity	N (%)
Caucasian	166 (30.0%)
Black	23 (4.1%)
Asian	355 (64.0%)
Hispanic	11 (1.99%)
Total	555 (100.0%)

* Others included: Arab (N=6), European (N=6), Indian (N=2), Russian (N=4)

6. Profession

Profession	N (%)
Management	46 (9.5%)
Technical	15 (3.1%)
Professional	50 (10.3%)
Sales	16 (3.3%)
Clerical	9 (1.9%)
Education	38 (7.8%)
Student	230 (47.4%)
Other	47 (9.7%)
Total	451 (100.0%)

* Others included: Nurse (N=3), Postman, Housewife (N=6), Business coordinator, Social worker, Law Enforcement (N=2), Stationary assistant, Psychologist, TV producer (N=2), Reporter (N=10), Photographer

7. Residing city and country

- Top three residing city: **Seoul** (N=81, 16.7%), **Daegu** (N=17, 3.5%), **Ulsan** (N=12, 2.5%)
- Top three residing country: **Korea** (N=308, 51.5%), **USA** (N=70, 11.7%), **Canada** (N=40, 6.7%)

8. Whether participated in previous Special Olympics event

Previous participation in SO	Local	Regional	Other world	Unified sports
No	334 (70.2%)	340 (71.3%)	370 (77.7%)	412 (87.8%)
Yes	142 (29.8%)	137 (28.7%)	106 (22.3%)	57 (12.2%)
Total	476 (100.0%)	477 (100.0%)	476 (100.0%)	469 (100.0%)

9. Social media user?

Social Media User?	N (%)
No	130 (22.0%)
Yes	448 (75.7%)
Total	578 (100.0%)

10. Social media services that you used at least once a week

	Facebook	Twitter	Youtube
No	89 (18.0%)	359 (81.2%)	332 (73.3%)
Yes	406 (82.0%)	83 (18.8%)	121 (26.7%)
Total	495 (100.0%)	442 (100.0%)	453 (100.0%)

11. Social media by which you would like to receive future SO information

	Facebook	Twitter	Youtube	Do not want to	Total
Total	312 (73.6%)	5 (1.18%)	11 (2.59%)	96 (22.7%)	424 (100.0%)

12. Top three most memorable moments at the 2013 World Games.

- (1) Opening ceremony N=100 (37.0%)
- (2) Athletes competitions N= 83 (30.7%)
- (3) Meeting people N= 25 (9.3%)

2. Relationship among demographic variables

a) Gender and Social media User:

Females tend to use social more than males.

b) Constituent group and social media user

There was a significant relationship between constituent group and social media user and **Coaches** (94.4%), **Officials** (93.3%), **Youth Summit Group** (87%), and **Sponsors** (100.0%) were the high usage groups of social media.

c) Education and social media user:

More educated groups were higher usage groups of social media.

d) Ethnicity and social media user:.

No significant relationship.

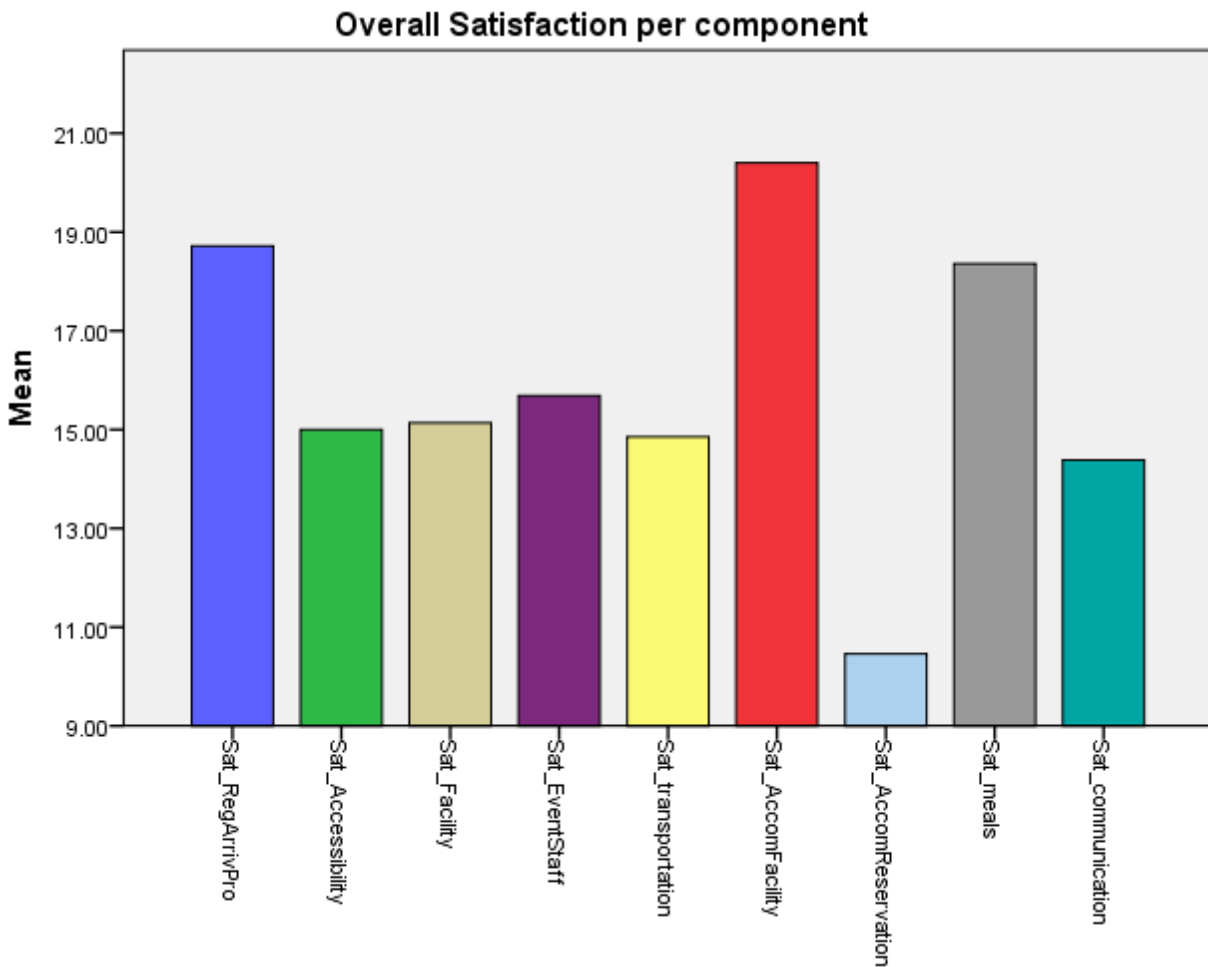
e) Profession and social media user:

No significant relationship.

3. Overall Satisfaction

Note: Exploratory factor analysis (EFA) and reliability analysis were run on all 9 Satisfaction components.

Accessibility & Facility components and **Accommodation** (*Accommodation Facility & Accommodation Reservation*) component were separated into two additional factors each, thus revealed 9 total Satisfaction components, themes or factors and reliability tests on these categorization (or “groupings”) were all acceptable. In addition, the range of mean scores on the y-axis of each graph varies due to the number of specific questions that belong to each component or theme, such as Meals or Transportation.



Legends:

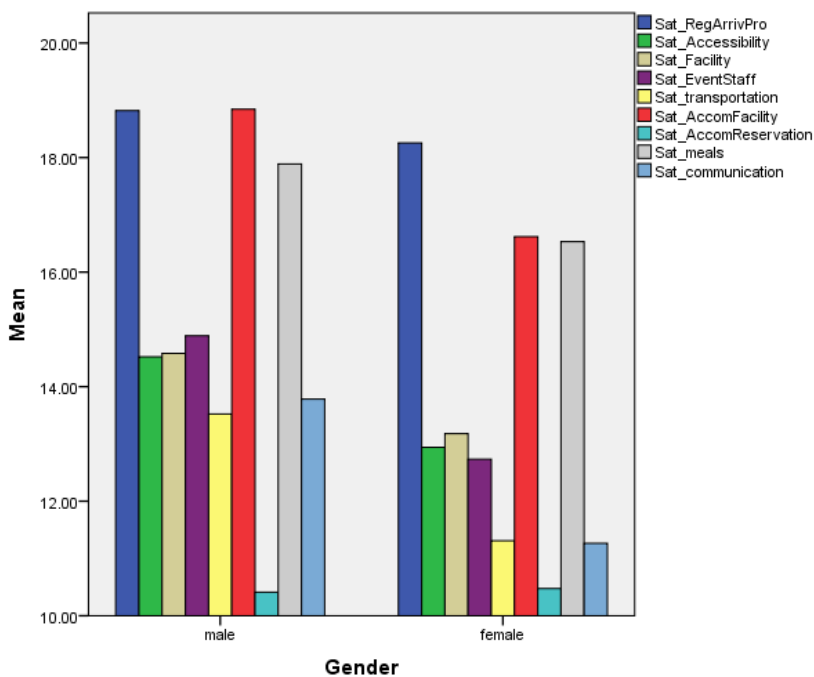
- Sat_RegArrivProc – Satisfaction on Registration and Arrival Process
- Sat_Accessibility – Satisfaction on Accessibility
- Sat_Facility – Satisfaction on Facility
- Sat_EventStaff – Satisfaction on Event Staff
- Sat_transportation – Satisfaction on Transportation
- Sat_AccomFacility – Satisfaction on Accommodation Facilities
- Sat_AccomReservation – Satisfaction on Accommodation Reservations Process
- Sat_meals – Satisfaction on Meals
- Sat-communication – Satisfaction on Communications

4. Gender comparison on Satisfaction

Note that the following group comparison tests were run on component scores to minimize the likelihood of misjudging the significance as simultaneous multiple tests tend to increase such likelihood.

Satisfaction components		Mean (SE)
Registration & Arrival process	Male	18.82 (0.38)
	Female	18.25 (0.47)
Accessibility	Male	14.52 (0.24)
	Female	12.94 (0.20)
Facility	Male	14.58 (0.21)
	Female	13.18 (0.20)
Event & Venue staff	Male	14.89 (0.24)
	Female	12.73 (0.22)
Transportation	Male	13.52 (0.30)
	Female	11.31 (0.26)
Accommodation Facility	Male	18.84 (0.29)
	Female	16.62 (0.30)
Accommodation Reservation	Male	10.41 (0.26)
	Female	10.47 (0.34)
Meals	Male	17.89 (0.30)
	Female	16.53 (0.26)
Communication	Male	13.78 (0.27)
	Female	11.27 (0.25)

* In general, **male respondents had a higher level of satisfaction** than females. Please see descriptive statistics that follow.



4. Constituent group comparison on Satisfaction

Note that the following “group comparison tests” were run on components scores to minimize the likelihood of misjudging the significance as simultaneous multiple tests tend to increase such likelihood.

Constituent groups showed significant difference on all satisfaction components **except Registration & Arrival Process component** based on one-way ANOVAs, therefore follow-up tests were run to identify significant group differences on each of 8 significant components. Note that only significant pair of two groups is reported.

For each comparison, the group with a **higher mean has a higher satisfaction on average** than the other group. For example, the first one under Accessibility indicates that the Coaches group has a higher satisfaction than the Volunteers. A category such as **Transportation** resulted in a **tremendous variability** between groups, whereas a category like **Meals** had **relatively uniform** responses among the groups. Overall, the **Volunteer** group seems to have a **lower level of satisfaction** than **all** the other groups. The graphs that follow will illustrate the satisfaction level per component (category) by all 12 constituents.

Some highlights on constituent group comparisons (M: Mean score, SE: +/- Standard Error) -

a) Accessibility

Coach (M= 14.73, SE=0.57) and Volunteer (M= 12.23, SE=0.19)

Head of delegation (M= 16.86, SE=1.06) and **Volunteer (M= 12.23, SE=0.19)**

Honored guest (M= 14.46, SE=0.66) and Volunteer (M= 12.23, SE=0.19)

Youth summit group (M= 17.38, SE=0.53) and Family (M= 14.22, SE=0.41)

Youth summit group (M= 17.38, SE=0.53) and Volunteers (M= 12.23, SE=0.19)

Youth summit group (M= 17.38, SE=0.53) and Media (M= 13.58, SE=0.47)

Family (M= 14.22, SE=0.41) and Volunteers (M= 12.23, SE=0.19)

Volunteers (M= 12.23, SE=0.19) and Healthy Athlete Professionals (M=15.69, SE=0.72)

b) Facility

Honored guest (M= 16.16, SE=0.45) and **Volunteers (M= 12.49, SE=0.21)**

Youth summit group (M= 15.41, SE=0.52) and Volunteers (M= 12.49, SE=0.21)

Family (M= 15.07, SE=0.33) and Volunteers (M= 12.49, SE=0.21)

c) Event & Venue staff

Coach (M= 15.43, SE=0.55) and Volunteers (M= 11.71, SE=0.22)

Head of delegation (M= 16.88, SE=1.43) and Volunteers (M= 11.71, SE=0.22)

Honored guest (M= 15.00, SE=0.56) and Volunteers (M= 11.71, SE=0.22)

Officials (M=15.20, SE=0.99) and Volunteers (M= 11.71, SE=0.22)

Youth summit group (M= 17.86, SE=0.53) and **Volunteers (M= 11.71, SE=0.22)**

Youth summit group (M= 17.86, SE=0.53) and Media (M= 13.18, SE=0.63)

Family (M= 15.89, SE=0.32) and Volunteers (M= 11.71, SE=0.22)

Volunteers (M= 11.71, SE=0.22) and Healthy Athlete Professionals (M=15.85, SE=0.83)

d) Transportation

Coach (M= 15.27, SE=0.67) and Volunteers (M= 9.64, SE=0.22)

Head of delegation (M= 18.29, SE=1.13) and Volunteers (M= 9.64, SE=0.22)

Head of delegation (M= 18.29, SE=1.13) and Media (M= 12.07, SE=0.70)

Torch run (M=15.43, SE=1.21) and Volunteers (M= 9.64, SE=0.22)

Honored guest (M= 14.98, SE=0.58) and Youth Summit Group (M= 18.59, SE=0.43)

Honored guest (M= 14.98, SE=0.58) and Volunteers (M= 9.64, SE=0.22)

Officials (M=13.86, SE=0.94) and Youth Summit Group (M= 18.59, SE=0.43)

Officials (M=13.86, SE=0.94) and Volunteers (M= 9.64, SE=0.22)

Youth summit group (M= 18.59, SE=0.43) and Family (M= 14.04, SE=0.43)

Youth summit group (M= 18.59, SE=0.43) and Volunteers (M= 9.64, SE=0.22)

Youth summit group (M= 18.59, SE=0.43) and Media (M= 12.07, SE=0.70)

Youth summit group (M= 18.59, SE=0.43) and **Sponsors (M=16.00, SE=2.08)**

Head of delegation (M= 18.29, SE=1.13) and **Media (M= 12.07, SE=0.70)**

Volunteers (M= 9.64, SE=0.22) and Healthy Athlete Professionals (M=14.69, SE=0.89)

e) Accommodation facility

Coach (M= 19.87, SE=0.67) and Volunteers (M= 14.80, SE=0.28)

Head of delegation (M= 22.86, SE=0.88) and Volunteers (M= 14.80, SE=0.28)

Honored guests (M= 21.10, SE=0.58) and Volunteers (M= 14.80, SE=0.28)

Youth summit group (M= 21.82, SE=0.58) and Volunteers (M= 14.80, SE=0.28)

Family (M= 20.15, SE=0.45) and Volunteers (M= 14.80, SE=0.28)

Volunteers (M= 14.80, SE=0.28) and **Healthy Athlete Professionals (M=21.46, SE=0.85)**

f) Accommodation Reservation

Honored guest (M= 11.46, SE=0.41) and Family (M= 9.07, SE=0.36)

Honored guest (M= 11.46, SE=0.41) and **Media (M=8.39, SE=0.59)**

Officials (M=8.83, SE=1.09) and Youth summit group (M= 13.09, SE=0.44)

Youth summit group (M= 13.09, SE=0.44) and Family (M= 9.07, SE=0.36)

Youth summit group (M= 13.09, SE=0.44) and Media (M=8.39, SE=0.59)

g) Meals

Coach (M= 19.83, SE=0.76) and Volunteers (M= 15.84, SE=0.27)

Head of delegation (M= 22.44, SE=0.86) and Volunteers (M= 15.84, SE=0.27)

Youth summit group (M= 19.55, SE=0.66) and Volunteers (M= 15.84, SE=0.27)

h) Communication

Coach (M= 14.57, SE=0.62) and **Volunteers (M= 10.18, SE=0.23)**

Head of delegation (M= 16.14, SE=1.10) and Volunteers (M= 10.18, SE=0.23)

Honored guest (M= 14.85, SE=0.65) and Volunteers (M= 10.18, SE=0.23)

Officials (M=14.94, SE=0.67) and Volunteer (M= 10.18, SE=0.23)

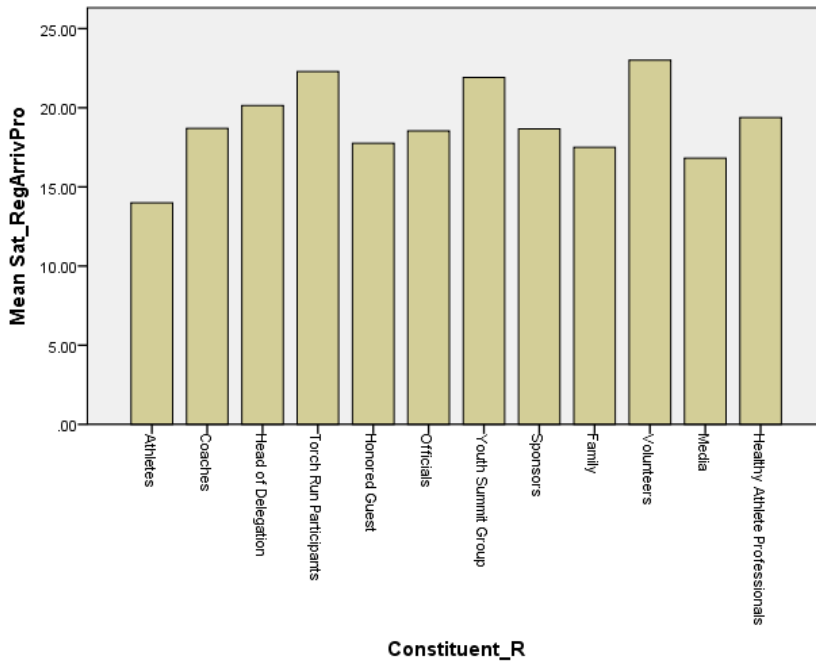
Youth summit group (M= 16.36, SE=0.73) and Volunteers (M= 10.18, SE=0.23)

Family (M= 13.30, SE=0.39) and Volunteers (M= 10.18, SE=0.23)

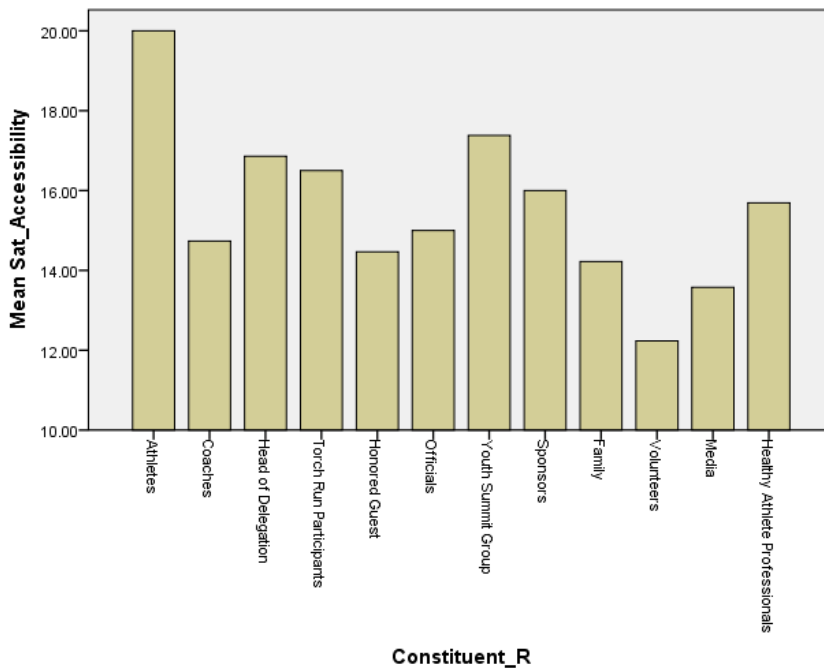
Volunteers (M= 10.18, SE=0.23) and Healthy Athlete Professionals (M=14.46, SE=0.87)

Satisfaction on Registration and Arrival Process by Constituent group

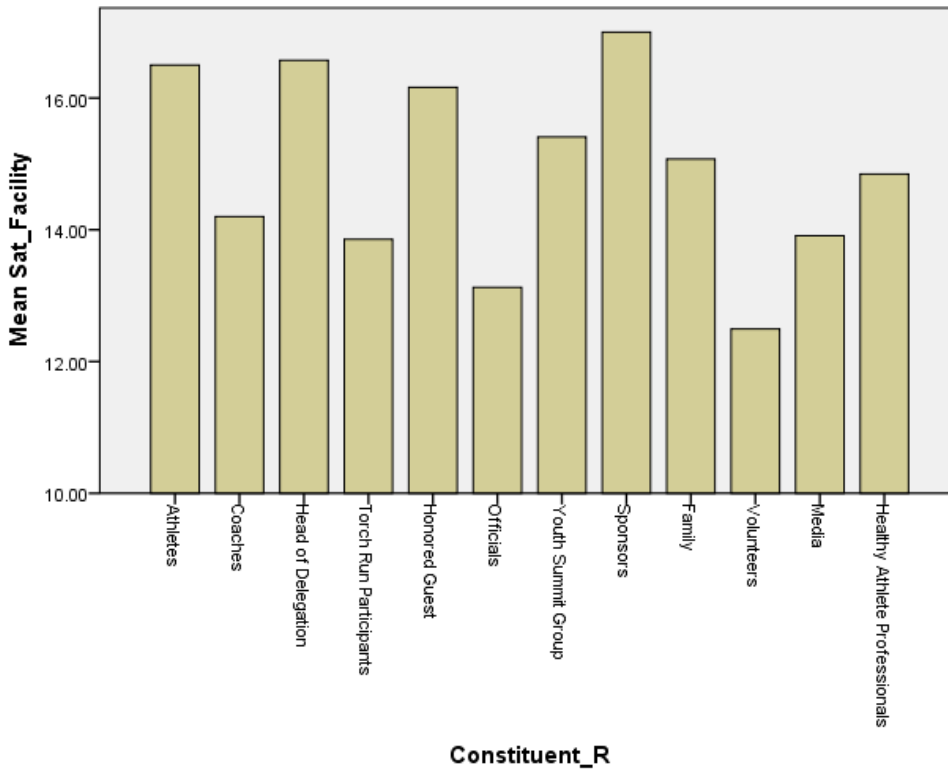
(Note: the range of mean scores on the y-axis of each graph varies due to the number of specific questions that belong to each component or theme, such as Meals or Transportation)



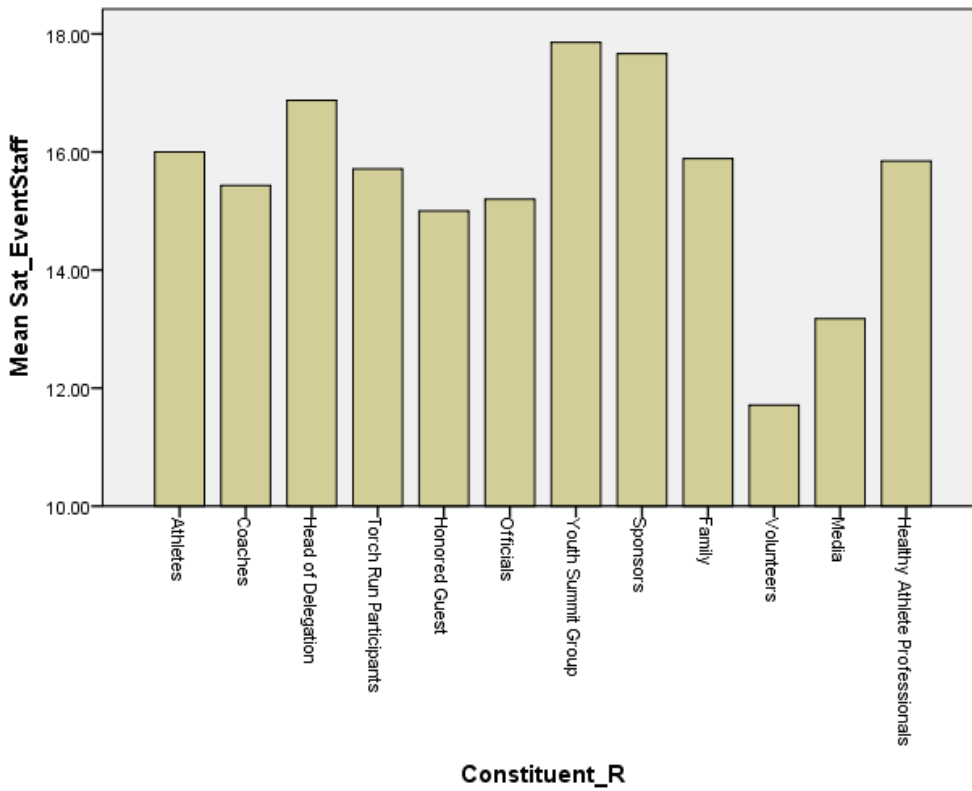
Satisfaction on Accessibility by Constituent group



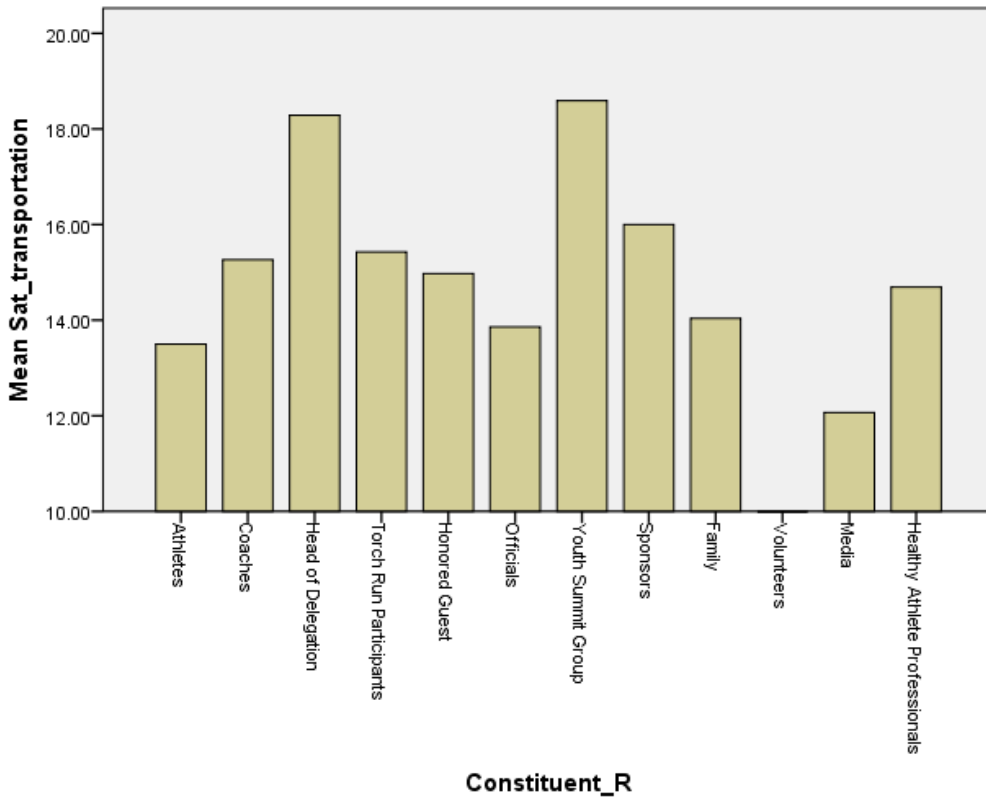
Satisfaction on Facility by Constituent group



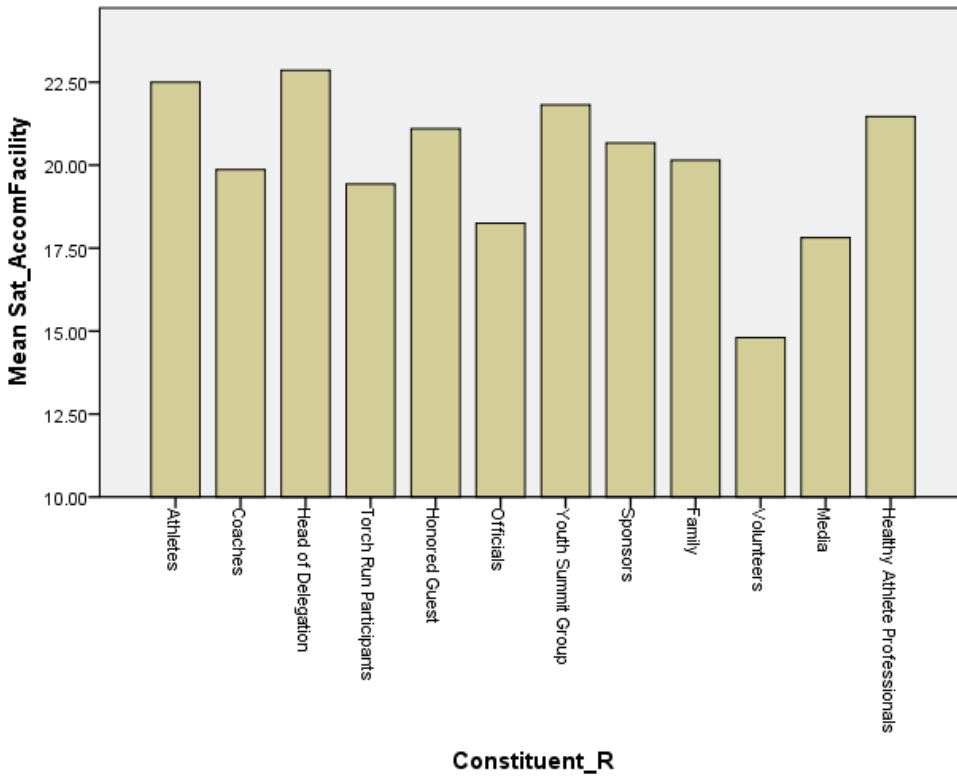
Satisfaction on Event and Venue Staff by Constituent group



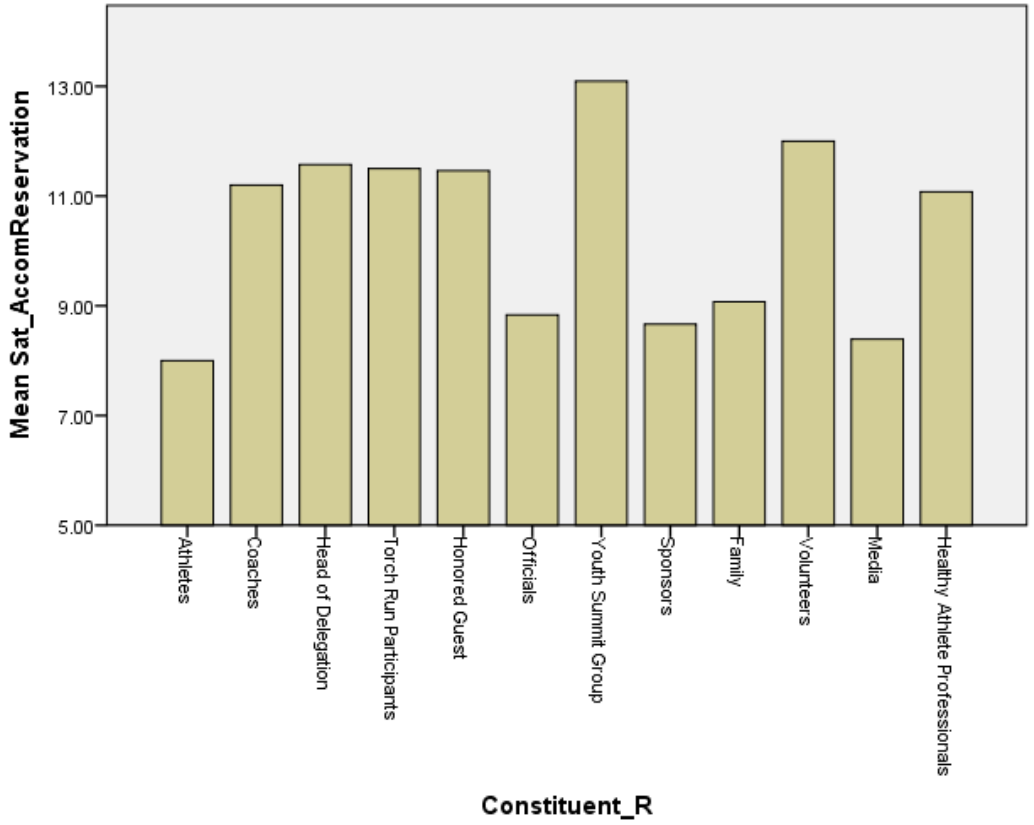
Satisfaction on Transportation by Constituent group (Note: Volunteers' mean score was 9.64 and thus is not shown on graph.)



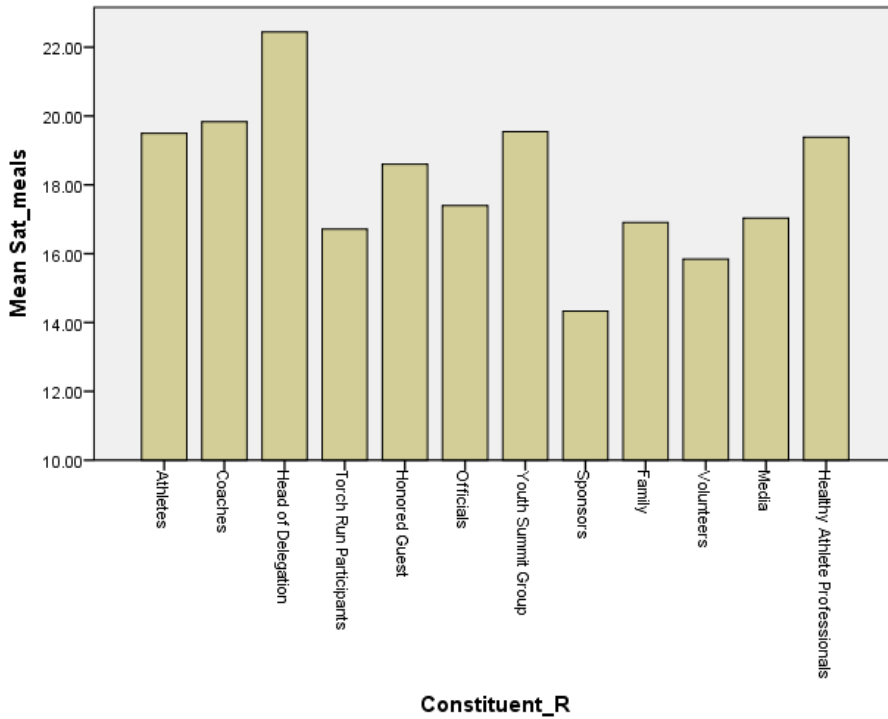
Satisfaction on Accommodation Facility by Constituent group



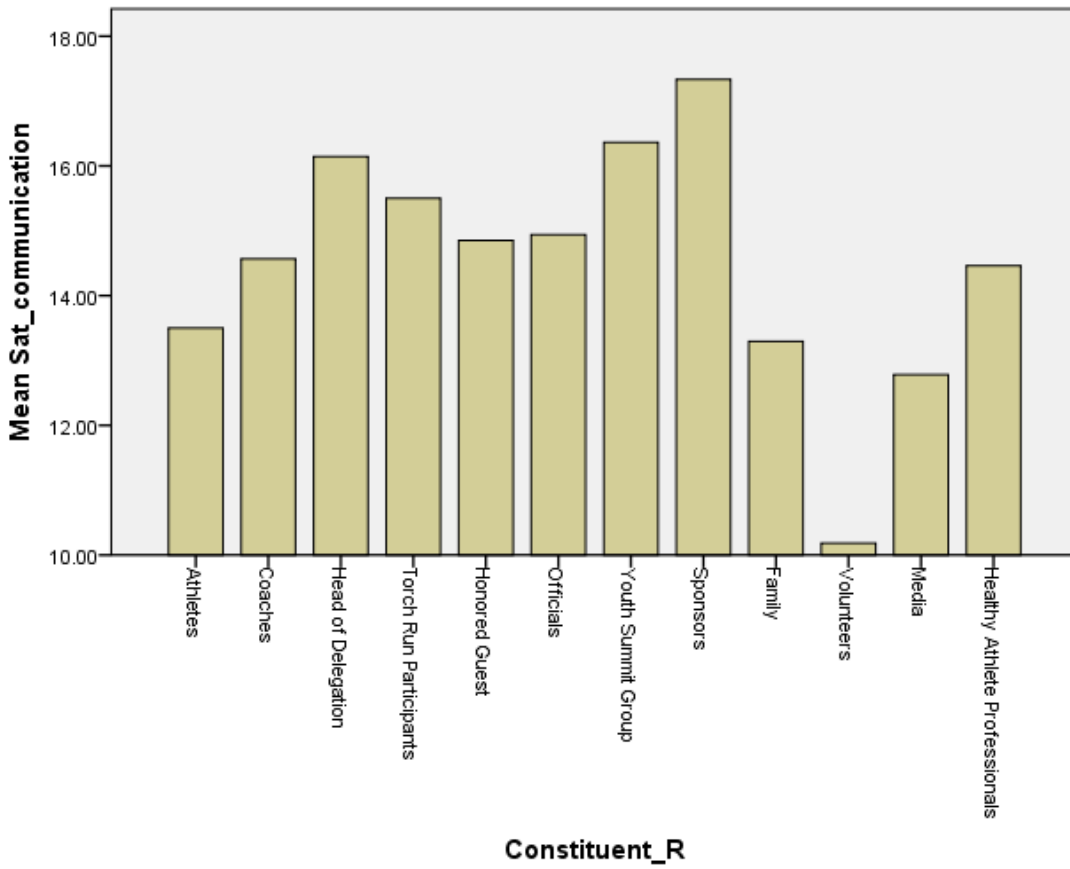
Satisfaction on Accommodation Reservation by constituent group



Satisfaction on Meals by constituent group



Satisfaction on Communication by constituent group



5. Constituent-specific analysis

(1) Athletes

1. Competition in the last 12 months before selected to go the World Games?

	N (%)
No	44 (39.3%)
Yes	68 (60.7%)
Total	112 (100%)

2. Competition after selected to go to the World Games?

	No. of times	
Local	1	32 (76.1%)
	2	6 (14.3%)
	3	2 (4.8%)
	5	1 (2.4%)
	More than 5	1 (2.4%)
	Total	42 (100.0%)
Regional	1	17 (65.5%)
	2	5 (19.3%)
	3	1 (3.8%)
	4	1 (3.8%)
	5	1 (3.8%)
	More than 5	1 (3.8%)
Total	26 (100.0%)	
National	1	23 (67.6%)
	2	5 (14.7%)
	3	3 (8.9%)
	5	2 (5.9%)
	More than 5	1 (2.9%)
	Total	34 (100.0%)
Invitational/international	1	10 (52.6%)
	2	5 (26.3%)
	3	3 (15.8%)
	5	1 (5.3%)
	Total	19 (100.0%)

(Note: this was a question where subjects were allowed to answer multiple times so total sample size varies.)

3. Satisfied with the World Games your coach and SO provided you with?

	N (%)
No	13 (11.7%)
Yes	98 (88.3%)
Total	111 (100%)

4. How would you like to be better prepared for the World Games?

	N(%)
More information about the venues / slopes	30 (26.8%)
Better knowledge about the rules	25 (22.3%)
More frequent training / Attending a training camp	67 (59.8%)
More competition opportunities	38 (33.9%)
More Unified competition opportunities	11 (9.8%)

Note: Subjects were allowed to check all that apply so the percentage is based on a total of 112.

5. How often do you train in the Special Olympics?

	N(%)
Less than once a week	21 (18.8%)
Once per week	12 (10.7%)
Twice per week	22 (19.6%)
More than twice per week	19 (17.0%)
I do not train	38 (33.9%)
Total	112 (100.0%)

6. How many weeks do you train with SO before competing in your sports?

	N(%)
0-4 weeks	19 (17.0%)
5-9 weeks	27 (24.1%)
10 weeks or more	21 (18.8%)
I do not train before competitions	45 (40.2%)
Total	112 (100.0%)

7. On average, how long is each training session?

	N(%)
Less than 30 minutes	19 (17.0%)
0.5-1.5 hours	10 (8.9%)
1.5 hours or more	44 (39.3%)
I do not train	39 (34.8%)
Total	112 (100.0%)

8. How often do you participate in games or competitions?

	N(%)
More than once a month	28 (25.0%)
On average, once every 3 months	28 (25.0%)
On average, once every 6 months	13 (11.6%)
On average, once a year	30 (26.8%)
I did not participate in a games or competition this past year	13 (11.6%)
Total	112 (100.0%)

9. Did your coach help you create a personalized program to develop your sports skills in the past year?

	N (%)
No	20 (17.9%)
Yes	83 (82.1%)
Total	111 (100%)

10. Satisfaction with

	Very satisfied	Unsatisfied	Neutral	Satisfied	Very Satisfied
Transportation	1 (0.9%)	8 (7.1%)	17 (15.2%)	41 (36.6%)	45 (40.2%)
Accommodation	3 (2.8%)	2 (1.9%)	22 (20.4%)	42 (38.9%)	39 (36.1%)
Venue	4 (3.6%)	5 (4.5%)	16 (14.3%)	38 (33.9%)	49 (43.8%)
Opening Ceremony	1 (0.9%)	1 (0.9%)	18 (16.7%)	22 (20.4%)	66 (61.1%)
Closing C.	1 (2.1%)	0 (0.0%)	9 (19.1%)	11 (23.4%)	26 (55.3%)
Medal Cerem.	1 (1.4%)	3 (4.2%)	13 (18.1%)	19 (26.4%)	36 (50.0%)
Non-sports events	2 (2.1%)	1 (1.0%)	14 (14.6%)	26 (27.1%)	53 (55.2%)
Healthy athletes screening	3 (3.4%)	4 (4.5%)	17 (19.3%)	29 (33.0%)	35 (39.8%)

11. Gender

	N (%)
Male	64 (57.1%)
Female	48 (42.9%)
Total	111 (100%)

12. Sports

	N (%)
Alpine skiing	12 (13.4%)
Cross country skiing	9 (10.1%)
Snowboarding	13 (14.6%)
Snowshoeing	17 (19.1%)
Speed skating	9 (10.1%)
Figure skating	24 (27.0%)
Floor hockey	5 (5.6%)
Total	89 (100%)

(2) Coaches

1. Opinion on

	Requires reorganization	Area of concern	Neutral	Met expectation	Exceeded expectation
Professionalism of officials	3 (10.3%)	1 (3.4%)	7 (24.1%)	10 (34.5%)	8 (25.8%)
Meetings	1 (3.4%)	2 (6.9%)	6 (20.7%)	11 (37.9%)	9 (31.0%)
Training opportunities	2 (6.9%)	2 (6.9%)	4 (13.8%)	5 (17.2%)	15 (51.7%)
Training Facility Access	2 (6.9%)	4 (13.8%)	6 (20.7%)	15 (51.7%)	3 (10.3%)
Conduct of competition	1 (3.4%)	2 (6.9%)	3 (10.3%)	15 (51.7%)	8 (27.6%)

2. Sports your athletes participated in

	N (%)
Cross country skiing	5 (17.2%)
Figure skating	1 (3.4%)
Floor hockey	6 (20.7%)
Floor ball	3 (10.3%)
Snowshoeing	12 (41.4%)
Speed skating	2 (6.9%)
Total	29 (100%)

3. Coaching years: Average **12.77 years** with Standard Deviation (SD) of 8.412 years

4. Certification

	Special Olympics	National Sports Foundation	University of Sports
N (%)	20 (71.4%)	12 (38.7%)	8 (28.6%)

Note: total # of respondents for this question was 28

5. Prior competition: National games (N = 8) and national floor hockey competition (N=3). Others with frequency of 1 included Bowling, basketball, soccer, golf, softball, cross-country skilling, MIL, Prague games, State championship.

6. How your athletes were selected

	N (%)
Selection among domestic competition winners	10 (40.0%)
Selection among international competition winners	2 (8.0%)
Through a specific nomination process	9 (36.0%)
Recommendation by coach	4 (16.0%)
Total	25 (100.0%)

Note: Others included Luck of the draw

7. How did you prepare your athletes?

	Training camps	Competitions by SO	Dedicated Training program
N (%)	19 (67.9%)	13 (46.4%)	18 (58.1%)

Note: total # of respondents for this question was 28 and other included state competition and trains on the beach.

8. Personalized program?

	N (%)
No	20 (64.5%)
Yes	9 (35.5%)
Total	31 (100%)

9. Coaching development?

	N (%)
No	22 (75.9%)
Yes	7 (24.1%)
Total	29 (100%)

10. If yes to coaching development, how often?

	N (%)
More than once per year	8 (40.0%)
Once per year	2 (10.0%)
Once every two years	6 (30.0%)
Less than once every two years	4 (20.0%)
Total	20 (100%)

(3) Family

1. Satisfaction

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied
Satisfaction	1 (1.9%)	0 (0.0%)	3 (5.7%)	32 (60.4%)	17 (32.1%)

2. Attended events (Multiple response Q.)

(1) Competitions with delegation	N=50 (94.3%)
(2) Competitions without delegation	N=33 (62.3%)
(3) Family Reception	N=28 (52.8%)
(4) Opening Ceremonies	N=45 (48.9%)
(5) Closing Ceremonies	N=25 (47.2%)
(6) Family Tours	N=15 (28.3%)
(7) Youth Rally	N=1 (1.9%)
(8) Young Athletes Demo	N=0 (0.0%)

3. Satisfaction with non-sports activities

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied
Satisfaction	0 (0.0%)	2 (3.8%)	19 (35.8%)	25 (47.2%)	7 (13.2%)

4. Overall experience

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied
Satisfaction	0 (0.0%)	1 (1.9%)	10(18.9%)	32 (60.4%)	10 (18.9%)

5. Future involvement

	Very unlikely	Unlikely	Neutral	Likely	Very Likely
	0 (0.0%)	0 (0.0%)	4 (7.5%)	24 (45.3%)	25 (47.2%)

(4) Final Leg Torch Runners

1. Event well-organized?

	N (%)
No	0 (0.0%)
Yes	9 (100.0%)
Total	9 (100.0%)

Note: “Lots of last minute changes, but flexible.”

2. Did the Torch Tun generate substantial media attention?

	N (%)
No	0 (0.0%)
Yes	9 (100.0%)
Total	9 (100.0%)

3. Did you have clear understanding of purpose and involvement?

	N (%)
No	0 (0.0%)
Yes	9 (100.0%)
Total	9 (100.0%)

4. Did the Torch Run strengthen the connection with local community?

	N (%)
No	0 (0.0%)
Yes	9 (100.0%)
Total	9 (100.0%)

5. Did participation impact your interest and ability to raise funds for local SO?

	N (%)
No	0 (0.0%)
Yes	9 (100.0%)
Total	9 (100.0%)

(5) Global Youth Activation Group

1. How early did the invitation arrive?

About 6 months ago (N=5), 4-5 months ago (N=4), 1 year (N=1), Came on time (N=2)

2. Received any registration or orientation prior to?

	N (%)
No	1 (4.2%)
Yes	23 (95.8%)
Total	24 (100.0%)

3. Recommend to others?

	Very unlikely	Unlikely	Neutral	Likely	Very likely
	0 (0.0%)	0 (0.0%)	4 (7.5%)	24 (45.3%)	25 (47.2%)

4. Why did you apply for the GYAS?

	N =
Great opportunity and experience	9 (36%)
To take care of athletes	5 (20%)
Learn about SO	3 (12%)
Others	8 (32%)

5. How did you learn about the GYAS event?

	N=
Regional, countries organization	6 (24%)
Special Olympics offices	5 (20%)
Introduced through someone	2 (8%)
Others	12 (48%)

(6) Head of Delegation

1. Was the 2013 World Winter Games sufficiently defined by SOI?

	N (%)
No	0 (0.0%)
Yes	8 (100.0%)
Total	24 (100.0%)

2. Rate on HOD meeting effectiveness?

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Total
Satisfaction	1 (11.1%)	2 (22.2%)	3 (33.3%)	3 (33.3%)	0 (0.0%)	9 (100.0%)

3. Rate on DAL effectiveness?

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Total
Satisfaction	0 (0.0%)	0 (0.0%)	1 (11.1%)	3 (33.3%)	5 (55.6%)	9 (100.0%)

4. Transportation used?

	N (%)
Shuttle bus	6 (85.7%)
Personal car	1 (14.3%)
Total	7 (100.0%)

5. Level of satisfaction with transportation?

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Total
	0 (0.0%)	1 (11.1%)	1 (11.1%)	5 (55.6%)	2 (22.2%)	9 (100.0%)

(7) Officials

1. Sports officiated

	N (%)
Floor hockey	6 (37.5%)
Speed skating	2 (12.5%)
Figure skating	3 (18.8%)
Snowshoeing	1 (6.2%)
Alpine	4 (25.0%)
Total	16 (100%)

2. Were you athlete official?

	N (%)
No	5 (82.5%)
Yes	3 (17.5%)
Total	8 (100.0%)

3. Delegation of responsibility of officials

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Total
	0 (0.0%)	0 (0.0%)	4 (23.5%)	7 (41.2%)	6 (35.3%)	17 (100.0%)

4. Motivation of officials

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Total
	0 (0.0%)	1 (5.9%)	3 (17.6%)	7 (41.2%)	6 (35.3%)	17 (100.0%)

(8) Sponsors

1. Why sponsored SO?

Exposure of your brand	To sell a product	Capturing target audience	Sense of CSR	Total
1 (25.0%)	1 (25.0%)	0 (0.0%)	2 (50.0%)	4 (100.0%)

2. Importance of outcomes of sponsorship

	Very low	Low	Average	High	Very high	Total
Exposure of brand	0 (0.0%)	0 (0.0%)	2 (50.0%)	1 (25.0%)	1 (25.0%)	4 (100.0%)
Capturing your target	0 (0.0%)	0 (0.0%)	3 (75.0%)	1 (25.0%)	0 (0.0%)	4 (100.0%)
Sense of CSR	0 (0.0%)	0 (0.0%)	1 (25.0%)	1 (25.0%)	2 (50.0%)	4 (100.0%)
Selling your product	0 (0.0%)	2 (50.0%)	2 (50.0%)	0 (0.0%)	0 (0.0%)	4 (100.0%)

3. Satisfaction with ROI?

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Total
Satisfaction	0 (0.0%)	0 (0.0%)	3 (75.0%)	0 (0.0%)	1 (25.0%)	4 (100.0%)

4. Experience met expectation?

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Total
Signage	0 (0.0%)	1 (25.0%)	2 (50.0%)	1 (25.0%)	0 (0.0%)	4 (100.0%)
Recognition	0 (0.0%)	0 (0.0%)	3 (75.0%)	1 (25.0%)	0 (0.0%)	4 (100.0%)

5. Events attended?

Opening ceremony (N=2), Healthy athletes (N=2), Competition (N=1), Young athletes demonstration (N=1), MATP demonstration (N=1), Closing ceremony (N=1).

6. Will you attend the next game?

	Very unlikely	Unlikely	Neutral	Likely	Very likely	Total
Satisfaction	0 (0.0%)	1 (25.0%)	1 (25.0%)	0 (0.0%)	2 (50.0%)	4 (100.0%)

(9) Volunteers

1. Which volunteer department?

	N (%)
DAL/Interpretation	45 (19.5%)
Office assistance/IT assistance	23 (10.0%)
Event guide/transportation	29 (12.6%)
Game operation/event assistance	119 (51.5%)
Facility management/supplies management	9 (3.9%)
Healthy athletes	5 (2.2%)
SnowshoeingLETR	1 (0.4%)
Total	231 (100%)

2. What was your motivation to participate?

	N (%)
A new experience	0 (0.0%)
To build friendship	119 (98.3%)
A passion for volunteer work	0 (0.0%)
To take part in global sports	2 (1.7%)
Total	121 (100%)

3. Satisfaction on services received

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Total
Cyber education	11 (4.7%)	18 (7.7%)	111 (47.6%)	75 (32.2%)	18 (7.7%)	233 (100.0%)
Training of roles and assignments	47 (20.2%)	52 (22.3%)	90 (38.6%)	39 (16.7%)	5 (2.1%)	233 (100.0%)
Team appointment	40 (17.2%)	50 (21.5%)	80 (34.3%)	52 (22.3%)	11 (4.7%)	233 (100.0%)
Accommodation	69 (29.6%)	56 (24.1%)	68 (29.3%)	31 (13.4%)	8 (3.4%)	232 (100.0%)
Transportation	89 (38.2%)	56 (24.0%)	59 (25.3%)	26 (11.2%)	3 (1.3%)	233 (100.0%)
Uniform design	25 (10.7%)	54 (23.2%)	75 (32.2%)	57 (24.5%)	22 (9.4%)	233 (100.0%)
Working time	38 (16.3%)	36 (15.5%)	86 (36.9%)	62 (26.6%)	11 (4.7%)	233 (100.0%)
Delegation of responsibility	58 (24.9%)	41 (17.6%)	87 (37.3%)	39 (16.7%)	8 (3.4%)	233 (100.0%)
Meals	22 (9.4%)	40 (17.2%)	85 (36.5%)	65 (27.9%)	21 (9.0%)	233 (100.0%)

4. Felt well prepared for your volunteer assignment?

	N (%)
No	16 (31.7%)
Yes	159 (68.2%)
Total	175 (100.0%)

Additional Comments:

	N
Lack of training education	17(40%)
Lack of communication and information	9(21%)
Others	16(38%)

5. Plan to participate in the future Game?

	N (%)
No	9 (5.7%)
Yes	185 (94.3%)
Total	194 (100.0%)

Additional Comments:

	N
Unorganized	7(19%)
Lack of communication	4(10%)
Lack of Transportation	3(8%)
Others	22(61%)

(10) Media

1. Received any info on registration or pre event orientation?

	N (%)
No	18 (45.0%)
Yes	19 (55.0%)
Total	37 (100.0%)

2. Opinion / rating on

	Requires re-organization	Area of concern	Neutral	Met expectation	Exceeded expectation	Total
Media check-in process	4 (10.0%)	5 (13.5%)	13 (35.1%)	8 (21.6%)	7 (18.9%)	37 (100%)
Media zone access at venue	7 (17.5%)	7 (17.5%)	15 (40.5%)	7 (18.9%)	1 (2.7%)	37 (100%)
Media center operations	3 (8.1%)	6 (16.2%)	14 (37.8%)	11 (29.7%)	2 (5.4%)	37 (100%)
Media access to opening & closing ceremony	12 (38.7%)	9 (29.0%)	9 (29.0%)	0 (0.0%)	1 (3.2%)	31 (100%)

(11) Honored Guests

1. What is your current relationship with Special Olympics?

	N (%)
Board member	11 (23.4%)
Celebrity supporter	4 (8.5%)
Corporate sponsor	4 (8.5%)
Donor	4 (8.5%)
Government leader	3 (6.4%)
Program leader	2 (4.3%)
Other supporter	19 (40.4%)
Total	47 (100%)

2. Registered as...

	N (%)
All star Fan	36 (70.6%)
MVP Fan	15 (29.4%)
Total	51 (100%)

3. How did you receive information about the "Honored Guest" program ? (multi-response)

	N (%)
E-mail	40 (71.4%)
Phone	4 (7.1%)
Mail	7 (12.5%)
New media	2 (3.6%)
Other	3 (5.4%)
Total	56 (100.0%)

4. Attended event (multi-response)

	N (%)
Opening ceremony	33 (22.0%)
Competitions	30 (20.0%)
Global Development Summit	26 (17.3%)
Healthy Athletes Screenings	13 (8.7%)
Receptions	19 (12.7%)
Young Athletes Demonstration	3 (2.0%)
Motor Ability Training Program	2 (1.3%)
Youth Rally	8 (5.3%)
Research Symposium	6 (4.0%)
Closing Ceremony	6 (4.0%)
Other	4 (2.7%)
Total	150 (100%)

5. Presented award competitions

	N (%)
Skating	1 (1.9%)
Floor hockey	2 (3.8%)
Snowshoeing	1 (1.9%)

6. People who participated as a panelist or speaker at any event, satisfaction of logistics (ex. Communications, access, transportation, activities)

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Total
	0 (0.0%)	0 (0.0%)	3 (17.6%)	10 (58.8%)	4 (23.5%)	17 (100%)

7. Experience met expectation?

	Requires Reorganization	Area of Concern	Neutral	Met Expectation	Exceeded Expectation	Total
	4 (10.8%)	4 (10.8%)	5 (13.5%)	18 (48.6%)	6 (16.2%)	37 (100%)

8. Will you attend the next game?

	N (%)
No	1 (2.1%)
Yes	47 (97.9%)
Total	48 (100%)

9. What transportation service did you use? (Multi-response)

	N (%)
Shuttle Bus	41 (50.6%)
Car Service	22 (27.2%)
Personal Car	11 (13.6%)
City Bus	2 (2.5%)
Other	5 (6.2%)

10. Satisfaction of Transportation

	Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Total
Satisfaction	4 (8.2%)	5 (10.2%)	10 (20.4%)	17 (34.7%)	13 (26.5%)	49 (100%)

(12) Healthy Athlete Professionals

1. Was the information provided at the Healthy Athletes Professionals meeting helpful?

	Requires reorganization	Area of concern	Neutral	Met expectation	Exceeded expectation
	0 (0.0%)	0 (0.0%)	8 (61.5%)	3 (23.1%)	2 (15.4%)

2. Healthy Athletes well-attended?

	N (%)
No	0 (0.0%)
Yes	13 (100%)
Total	13 (100%)

3. Were the medical equipment and tools provided sufficient?

	Requires reorganization	Area of concern	Neutral	Met expectation	Exceeded expectation
	0 (0.0%)	1 (7.7%)	2 (15.4%)	8 (61.5%)	2 (15.4%)

4. Was the Healthy Athletes screening process well run?

	Requires reorganization	Area of concern	Neutral	Met expectation	Exceeded expectation
Opinion	0 (0.0%)	0 (0.0%)	3 (23.1%)	6 (46.2%)	4 (30.8%)

5. Was the overall set-up of Healthy Athletes program efficient?

	Requires reorganization	Area of concern	Neutral	Met expectation	Exceeded expectation
Opinion	0 (0.0%)	0 (0.0%)	3 (23.1%)	6 (46.2%)	4 (30.8%)

Addendum I

Volunteers Constituent Descriptive Analysis based on Gender

Due to the fact that the overall satisfaction levels for **Volunteers** were found to be lower than those of their counterpart groups, this constituent group was worth taking a look from another angle and the researchers decided to run a series of descriptive statistics to further identify if there was any difference on the satisfaction levels between male volunteers and their female counterparts. Unlike the previous tests, these descriptive analyses looked at the entire questionnaire items except for some missing data questions. Results were consistent with previous components analysis and indicated **that males were more satisfied than females.**

Question	Mean (SE)	
	Male	Female
Ease of Registration	3.31 (0.11)	3.20 (0.05)
Timeliness of Registration Processing and Confirmation	3.31 (0.11)	3.07 (0.06)
Ease of entrance to venues	3.39 (0.16)	3.22 (0.07)
Credentialing process	3.78(0.13)	3.54 (0.07)
Pre-Games Information	2.90 (0.16)	2.29 (0.08)
Restroom availability	3.75 (0.14)	3.42 (0.08)
Language service	3.37 (0.12)	2.79 (0.07)
Internet network service	3.18 (0.15)	2.63 (0.08)
Food/drink concessions	3.51 (0.14)	2.74 (0.08)
Venue cleanliness	3.53 (0.14)	3.18 (0.08)
Venue staff courtesy	3.86 (0.13)	2.96 (0.07)
Staff Knowledge of Special Olympics	3.41 (0.16)	2.52 (0.07)
Enforcement of credential access	3.53 (0.12)	3.01 (0.08)
Staff Knowledge of the event info	3.20 (0.16)	2.49 (0.07)
Amount of information (Timetables, Bus stops, etc.)	2.12 (0.14)	1.81 (0.07)
Shuttle bus service	2.45 (0.18)	2.04 (0.08)
Safety while on the bus	3.65 (0.15)	3.42 (0.08)
Shuttle Schedule was timely	2.45 (0.18)	1.98 (0.07)
Availability of accommodation options	2.37 (0.15)	1.85 (0.07)
The distance to the venues	2.61 (0.15)	2.09 (0.07)
The cleanliness	3.14 (0.16)	2.75 (0.08)
Comfort	2.96 (0.16)	2.50 (0.08)
Courtesy of the staff	3.33 (0.14)	2.91 (0.07)
Service	3.27 (0.13)	2.91 (0.07)
Pyeongchang as host city (climate, affordability scenery..)	3.47 (0.12)	3.23 (0.07)
Distance to the meal venues	3.65 (0.13)	3.34 (0.07)
Cleanliness of cafeteria	3.53 (0.16)	3.24 (0.07)

Food/drink quality	3.24 (0.17)	3.18 (0.08)
Availability of healthy food options	3.08 (0.13)	2.61 (0.08)
Service	3.42 (0.16)	3.10 (0.07)
Pre-Games Communications	2.75 (0.13)	2.22 (0.07)
Language Services	3.14 (0.16)	2.49 (0.07)
Interaction with Games Volunteers	3.25 (0.16)	2.69 (0.08)
Clear Signage	2.84 (0.16)	2.16 (0.07)

SUMMARY

Based on the analysis of **233 Volunteers** (51 males and 182 females), here are some highlights for the future planning and implementation. There was not a noticeable variability between genders when it comes to satisfaction for certain factors. It seems that the large percentage that the Volunteer constituent group make up for the entire sample of this study does impact the overall satisfaction levels of the 2013 Winter Games. Nevertheless, these insights may be worth considering for the future as the Volunteer group will almost always be the largest constituent group in each and every Games.

Strengths

- Credentialing
- Restroom availability
- Transportation safety
- Pyeongchang as host city
- Distance to cafeteria
- Cleanliness of cafeteria
- Food/drink quality
- Meal service

Weaknesses

- Pre-Game information
- Transportation Info
- Shuttle bus service
- Timely bus schedule
- Accommodation options
- Distance to venues
- Clear signages

For any further inquiry on the report of this study, please do not hesitate to email J. Andrew Choi, Ph.D. at aliphex@hanyang.ac.kr. Thank you very much.