Report of a survey on (licensed) female participation in sport federations within the European Union

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Disclaimer

The information in this independent evaluation report is deemed correct at time of publication (July 2023) but the author cannot be held responsible for any errors or omissions.

1. Introduction

Women aspiring for high performance sport setting are faced with diverse factors that hinders their career progress (Scharfenkamp, Wicker & Frick, 2023). Though there has been a steady increase in the participation of women in general, there are still huge factors that limit this in many areas of sport (Borrueco, et al., 2022). For example, though there is an increase in the proportion of women athletes in high performance sport, there has been a decrease in the proportion of women in coaching in high performance sport (Serpell, et al. 2023).

There are also age-specific variations on the participation of women in different roles. Furthermore, the tenure of women coaches in high performance sport is shorter than that of men (Serpell, et al. 2023). Other areas of women´s participation in sport like volunteering are still significantly low due to inherent challenges women are faced with in sport (Scharfenkamp, Wicker & Frick, 2023; Serpell, et al. 2023).

Other than a secure working environment, high performance environment should be composed of networking, mentors, and sponsors to enhance the performance of the people working within (Serpell et al. 2023). These critical stakeholders are limited for women in sport. In many sport settings, gender is not generally seen as a complex set of social relations that requires constant dialogue between the interacting parties. This to a large extend requires constant feedback to accommodates for all parties and build better relations (Levi, et al., 2022).

Steady rise of women in professional sport is due mainly to some deliberate European Union (EU) and government policies in the EU. To this regard, it is important to understand the factors that still limit the participation of women. In addition, it is significant to also recognise the different factors that enhances the participation of women in different areas of sport.

2. Method

Measurement

A questionnaire was developed to collect the data for this project. Twenty-nine questions were developed based on a five-point Likert scale which is a survey form that measures how people feel and their levels of agreement with a statement. The questionnaire was developed based on the findings of a literature review that was conducted in the context of Work Package two of the GAP-Women project. The questions were developed based on factors that influence the participation of women in sport. These intrapersonal, interpersonal, and structural facilitators and intrapersonal, interpersonal, and structural constraints of provide a deeper

understanding of women´s participation in sport. Facilitators are understood as factors that make the participation of women in sport easier. Intrapersonal facilitators are personal level factors that make the participation of women less difficult. Furthermore, Interpersonal facilitators are factors that enhance the participation of women in sport due to the relationships or communication with others. Structural facilitators are organisational factors that enhance the participation of women in sport. On the other hand, constraints are factors that restrict the participation of women in sport. Intrapersonal and Interpersonal constraints are understood as factors that limit the participation of women in sport at the personal level and in their relationships and communication with others. The structural constraints are organisational factors that restrict the involvement of women in sport.

The intrapersonal facilitators were measured with four items (questions) developed to evaluate the opportunities that facilitate the participation of women in sport at an individual level. This was measured on a five-point Likert scale (1=strongly disagree to 5 strongly agree).

The interpersonal facilitators were also measured with four items developed to evaluate the facilitators of women´s participation in sport through their relations with other individuals in their participation in competitive sport. This was also measured on a five-point Likert scale (1=strongly disagree to 5 strongly agree).

The structural facilitators were measured with six items developed to evaluate the significance of providing structural opportunities that facilitate the participation of women in sport at the organisational level. This was measured on a five-point Likert scale (1=not important at all to 5 very important).

The intrapersonal constraints were also measured with five items developed to evaluate the challenges women face at an individual level to manage the barriers to participation in sport. This was also measured on a five-point Likert scale (1=not at all to 5 to a very large extent).

The interpersonal constraints were also measured with four items to determine the frequency with which women face challenges in their relations with other individuals in their participation in sport. This was measured on a five-point Likert scale (1=never to 5 always).

The structural constraints were measured with six items to evaluate the challenges women are faced with at the organisational level. This was measured on a five-point Likert scale (1=strongly disagree to 5 strongly agree).

Additional six questions were developed to provide biographical information of the respondents such as age, country, sport, years of experience and if a license is required to compete in the respondent´s sport. In addition, the questionnaire opened with two icebreakers

where respondents were asked to list three words that come to mind when they think about women and competitive sport.

Data collection and sampling

The data were filled out by only women in various roles in sport. The selected organisations also represent community level organisations, regional level organisations, the national level, European level sport-specific organisation and European level no-sport specific organisations. A non-probability sampling was employed as only women between the identified age group and involved in sport could fill out the questionnaire. The five members of the Gap-Women project consortium from Italy, Spain, Luxemburg, and Sweden were tasked to share the survey from 23rd February to 15th April 2023.

Data analysis

The data was analysed using a statistical software, SPSS. All data were collated together and entered into the software, cleaned, recoded, and renamed before the analysis. Descriptive statistics were generated for each of the variables.

A statistical technique (Principal Component Analysis - CPA) for analysing large datasets that allows for the visualisation of multiple dimensions and preserving the information was used. The principal component analysis was conducted to identify whether the proposed set of items for the intrapersonal, interpersonal, and structural constraints and facilitators load on the proposed dimension. This was done as the items were specifically developed for the survey. Among the criteria of the CPA is that the Kaiser-Meyer-Olkin value needs to be above =0.7 to verify the sampling adequacy and an eigenvalue (values that explains the behaviour of the dependent variable in a scale) of above 1. After factors were identified, a reliability analysis was conducted to assess whether the items consistently define one common factor. Cronbach's alpha (measure of the consistency between the questions in one group) was used, and the threshold employed was .7 (Schrepp, M., 2020).

Out of above variables a correlation analysis was performed to find out whether a relationship exists between variables and determines the strength of the relationship. In addition, a T-test was also performed to estimate the true difference on the level of agreement on the questions between the groups of respondents using the group means.

3. Results

Descriptive statistics

In total, 242 respondents filled out the questionnaire within the stipulated timeframe. Out of this n=144 responses were completed and valid for analysis.

Respondents from 19 countries (n=242) filled out the questionnaire. Among them over 80%, n=14 were from the European Union countries. Over 53.3% of respondents were from Spain.

The average age of respondents was 41 years (n=237, m=41.17, sd=15.45). The respondents´ age ranged from 13 to 78 years.

In total, respondents from 50 sports, (n=237) filled the questionnaire. Among them were respondents from winter, summer Olympic sports, and recreational sports.

Out of the 239 respondents that filled out the questionnaire, 175, which represent 72.3%, require a license to compete in their sport while 26.4% (64) do not.

Women responded to the questionnaire (n=240) hold diverse roles in their sport. Out of these 47.5% (115) are competitive athletes based in Europe, 14.5% (35) referees/umpires, 12.4% (30) are in administration/leadership, 9.1% (22) coaches/technical officials and 15% (36) are engaged in other roles within the sport.

The average years of experience of the respondents in their sport is 16.5 years (n=235, m=16.58, sd=13.96). The experience of the women ranges from 1 to 65 years of experience in their respective sports.

Table 1. Summary statistics of mean and standard deviations for all variables

Variable name	Description	Mean value	Standard deviation
Q1_FAC_Intra1	A good part of my sport career has influenced people to include and accept me in my sport as a woman.	3.24	1.31
Q1_FAC_Intra2	My love for my sport motivates me to stay and support the development of the sport.	4.71	0.69
Q1_FAC_Intra3	My intentions to be a role model status for younger women motivates me to stay and succeed in my sport.	4.22	0.95
Q1_FAC_Intra4	I problematise the inclusion of women in my sport and that has helped change the status quo.	2.96	1.27
Q2_FAC_Inter1	Women need offers to mentorship and career development opportunities from fellow women in their sport.	3.88	1.06

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Q2_FAC_Inter2	The presence of male "Equity Champions" in a sport strengthens the advancement and acceptance of women in the environment.	3.63	1.13
Q2_FAC_Inter3	The existence of family and close network support structures is important for career advancement in competitive sport.	4.63	0.62
Q2_FAC_Inter4	Role models provide complementary skills that serve as job attractors.	4.15	0.88
Q3_FAC_Struc1	It is important to have women-only training and development courses or programmes to support aspiring young women in different areas of the sport.	3.24	1.31
Q3_FAC_Struc2	To avoid discrimination against women during recruitment processes, explicit legal prohibitions on discrimination against women should be included in the organisation´s legal documents.	4.17	1.09
Q3_FAC_Struc3	Stakeholders need to take a central role to ensure that the sport´s values and those of the organisation regarding the participation of women are congruent and promote equality.	3.24	1.31
Q3_FAC_Struc4	A quota system is necessary on all national sport organisations and its adherence should be rewarded with certification by a national government authority.	3.78	1.08
Q3_FAC_Struc5	Female role models in sport should be exemplified in society and the media.	4.63	0.81
Q3_FAC_Struc6	Gender equality should be a key requirement in any new discipline being developed in any sport.	4.68	0.87
Q4_CONS_Intra1	I feel like an outsider in my sport.	1.57	0.98
Q4_CONS_Intra2	I feel like I need to work more than men to earn my place as a woman.	2.76	1.48
Q4_CONS_Intra3	I have become self-reflexive to avoid sexism because of my male-dominated environment.	2.49	1.42
Q4_CONS_Intra4	The pressure I feel for being a woman undermines my performance.	1.73	1.04
Q4_CONS_Intra5	I adopt a non-threatening role due to an evident lack of knowledge and	2.28	1.21

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	misconception of gender equality initiatives by some men.		
Q5_CONS_Inter1	Favouritism and unwritten rules always hinder women`s advancement and reserve certain positions for men in my sport.	2.73	1.40
Q5_CONS_Inter2	In my interactions, dominant male language is still evident in our manuals, rules, and structures.	3.02	1.39
Q5_CONS_Inter3	Dominant male knowledge of the sport is still used to judge competencies, which directly disadvantages women in my sport.	2.84	1.31
Q5_CONS_Inter4	In my interactions with others, I realised that merit is easily replaced and justified by social conceptions of gender differences in my sport.	2.49	1.28
Q6_CONS_Struc1	Women are faced with a quite low job stability and security in various aspects of my sport.	3.25	1.29
Q6_CONS_Struc2	Male sport disciplines are considered as the norm and women´s disciplines emulate the male discipline terminologies, knowledge, and ideologies of the sport.	3.14	1.30
Q6_CONS_Struc3	Women, especially athletes, in my sport still receive far less pay than men.	3.41	1.47
Q6_CONS_Struc4	"Othering" of women´s sports reinforce stereotypes against women.	3.01	1.22
Q6_CONS_Struc5	The institutionalisation of equal funding and remuneration for male and female sports will boost media interest in female sport.	3.83	1.17
Q6_CONS_Struc6	Support structures in sport organisations for Dual career and work-life balance initiatives encourage women to continue sport careers.	3.57	1.47
Intrapersonal constraints	An indices of all five intrapersonal constraints grouped into one variable	2.17	1.05
Interpersonal constraints	An indices of all four interpersonal constraints grouped into one variable	2.98	1.03
Intrapersonal facilitators	An indices of all four intrapersonal facilitators grouped into one variable	4.52	0.58

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Structural facilitators	An indices of all six structural facilitators grouped into one variable	3.95	0.76
Age	Age of the respondents	41.17	15.45
License	License is required for practice of sport.	0.73	0.44
Experience	Years of experience in sport	16.58	13.96

Summary statistics that measure the respondent´s subjective perception of each of the statements/questions in the questionnaire were generated. Furthermore, graphical outputs were produced for each of the questions/statements and the cumulative percentage for each of the questions/statements reported as follows:

Facilitators

Intrapersonal

1. A good sport career has influenced people to include and accept me in my sport as a woman.

28.5% of respondents were undecided regarding the influence of a successful sport career on their acceptance in the sport. 26.4% slightly agreed and 19.4% strongly agreed. However, 15.3% of the respondents strongly disagreed to this proposition and 10.4% slightly disagreed.

2. My love for my sport motivates me to stay and support the development of the sport.

79.2% of the respondents agreed that the love for their sport is a strong motivation to stay and support its development and an additional 16% also slightly agreed. Only 1,4% strongly disagreed to this and another 0,7% slightly disagreed and 2,8% were undecided on this proposition.

3. My intentions to be a role model for younger women motivates me to stay and succeed in my sport.

50% of the respondents strongly agreed that aspiring for a role model status for other young women serves as a strong motivation to stay and succeed in their respective sport. 28.5% also slightly agreed to this and 16% were undecided. 4.2% slightly disagreed and 1.4% strongly disagreed to the proposition.

4. I problematise the inclusion of women in my sport and that has helped change the status quo.

30.6% of the respondents were undecided regarding problematising inclusion of women and 34% agreed to this preposition (20.1% slightly agreed and 13.9% strongly agreed). However,

35.5% disagreed to problematising the inclusion of women in their sport (18.8% slightly disagreed and 16.7% strongly disagreed).

Interpersonal

1. Women need offers to mentorship and career development opportunities from fellow women in their sport.

36.8% slightly agreed and 32.6% strongly agreed to the need for offers of mentorship and career development opportunities by other women. 20.8% of respondents were undecided and only 5.6% slightly disagreed and 4.2% strongly disagreed.

2. The presence of male "Equity Champions" in a sport strengthens the advancement and acceptance of women in the environment.

The majority of respondents 36.1% were undecided. 5.6% strongly disagreed and 6.3% slightly disagreed that the presence of Male Equity Champions will strengthen the acceptance and advancement of women in sport. Over all 52.1% (23.6% slightly agreed and 28.5% strongly agreed) agreed that the presence of Male Equity Champions will help the acceptance and advancement of women in sport.

3. The existence of family and close network support structures is important for career advancement in competitive sport.

An overall 93.7% (24.3% slightly agreed and 69.4% strongly agreed) agreed that family and network support structures for women is important for career advancement in competitive sport. Only 5.6% of respondents were undecided regarding this proposition and 0.7% slightly disagreed and no respondent strongly disagreed.

4. Role models provide complementary skills that serve as job attractors.

In total 79.9% (40.3% slightly agreed and 39.6 strongly agreed) of respondents agreed that the availability of role models provide an opportunity for young women to acquire complementary skills that will serve as job attractors in the future. Only 17.4% of the respondents were undecided regarding this proposition. 0.7% slightly disagreed and 2.1% strongly disagreed.

1. It is important to have women-only training and development courses/programmes to support aspiring young women in different areas of the sport.

74.3% of respondents found it important to provide a women-only training and development programmes/courses to support young and aspiring women in different areas of the sport. 25.7% did not find it important to provide this within the structures of the sport organisations.

2. To avoid discrimination against women during recruitment processes, explicit legal prohibitions on discrimination against women should be included in the organisation´s legal documents.

About 91% of respondents agreed that it is important that sport organisations have legal prohibitions against discrimination in their legal documents to avoid discrimination against women during recruitment processes. On the contrary, only 9% of the respondents did not find this important.

3. Stakeholders need to take a central role to ensure that the sport´s values and those of the organisation regarding the participation of women are congruent and promote equality.

74.3% of the respondents agreed that it is important that stakeholders take a central role in promoting the participation of women and promotion equality in their organisations. About 25.7% of respondents did not agree on the importance of this role of the stakeholders.

4. A quota system is necessary on all national sport organisations and its adherence should be rewarded with certification by a national government authority.

91% of respondents agreed that it is necessarily important for all national sport organisations to have gender quota systems and that the adherence to this principle should be rewarded with a certification by a national government authority. Only 9% of the respondents did not find this approach important.

5. Female role models in sport should be exemplified in society and the media.

A total of 92.4% of the respondents agreed that it is important for female role models in sport to be exemplified in society and the media to increase the participation of women in sport. Only 7.6% did not agree that this approach is important.

6. Gender equality should be a key requirement in any new discipline being developed in any sport.

95.1% agreed that it is important that gender equality is considered as a key requirement in any new sport discipline being developed to increase the participation of women. Only 4.9% of women did not agree that this is important.

Constraints

Intrapersonal

1. I feel like an outsider in my sport.

About 69.4% did not agree that they feel like outsiders in their sport by virtue of being women. 24.3% (11.8% very little and 12.5% somewhat) felt a bit like outsiders and only 6.3% agreed that they feel so.

2. I feel like I need to or work more than men to earn my place as a woman.

37.5% (22.2% quite well and 15.3% to a very large extent) responded that they feel like they need to or work more than men to earn their place in their sport. 31.3% (13.9% very little and 17.4% somewhat) experienced this feeling at a moderate level and 31.3% did not agree to the proposition.

3. I have become self-reflexive to avoid sexism because of my male-dominated environment.

38.9% did not agree that they become self-reflexive to avoid sexism because they are in male-dominated environment. 34.7% of respondents moderately considered this true while 26.4% agreed that they become self-reflexive to avoid sexism in male-dominated environments.

4. The pressure I feel for being a woman undermines my performance.

Over half of the respondents, 59%, did not agree that the pressure for being a woman undermines their performance in their respective roles in their sport. Only 7.7% (5.6% quite well and 2.1% to a very large extent) of the respondents agreed that this does happen. The remaining 33.4% (18.8% very little and 14.6% somewhat) of the respondents moderately agreed to having this experience.

5. I adopt a non-threatening role due to an evident lack of knowledge and misconception of gender equality initiatives by some men.

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37.5% that filled out the questionnaire did not agree that they adopt a non-threatening role due to misconceptions of gender equality initiatives by some men and 46.6% (18.1% very little and 28.5% somewhat) agreed that they moderately adopt this position. However, only 16% (11.1% quite well and 4.9% to a very large extent) of the respondents agreed that they adopt this role in their sport.

Interpersonal

1. Favouritism and unwritten rules always hinder women's advancement and reserve certain positions for men in my sport.

36.1% (23.6% often and 12.5% always) agreed that certain positions in their sports are reserved for men and that favouritism and unwritten rules hinder women´s advancement. However, 26.4% of respondents did not agree to this proposition. 37.5% (22.9% sometimes and 14.6% regularly) moderately agreed to this proposition.

2. In my interactions, dominant male language is still evident in my sport's manuals, rules, and structures.

Only 18.8% of respondents did not agree that in their interactions in their sport, dominant male language is still evident in sport manuals, rules, and structures. The overwhelming majority 81.2% (19.4% sometimes, 22.2% regularly, 20.1% often and 19.4% always) agreed that dominant male language is still evident in sport rules, manuals, and structures of sport organisations.

3. Dominant male knowledge of the sport is still used to judge competencies, which directly disadvantages women in my sport.

Even though the results of this proposition seem even, only 19.4% did not agree that dominant male knowledge is used to judge competences in their sport which disadvantages women. The majority, 80.6% (24.3% sometimes, 21.5% regularly, 22.2% often and 12.5% always) agreed that this does happen in their sport.

4. In my interactions with others, I realised that merit is easily replaced and justified by social conceptions of gender differences in my sport.

29.2% of respondents did not agree that merits are replaced and justified by conceptions of gender differences in their sports. 70.8% (24.3% sometimes, 22.2% regularly, 16.7% often and 7.6% always) of respondents agreed that this does happen in their sport.

Structural

1. Women are faced with a quite low job stability and security in various aspects of my sport.

43.7% (22.2% quite well and 21.5% to a very large degree) of respondents agreed that women are faced with quite low job stability and security in various aspects of their sport. The other 45.2% moderately agreed to this proposition and only 11.1% disagreed that women are faced with low job stability and security in their sport.

2. Male sport disciplines are considered as the norm and women´s disciplines emulate the male discipline's terminologies, knowledge, and ideologies of the sport.

14.6% of respondents did not agree while 41% (18.1% very little and 22.9% somewhat) moderately agreed and 44.5% (27.8% quite well and 16.7% to a very large degree) agreed that male sport disciplines are the norm and women´s disciplines emulate the male terminologies, knowledge, and ideologies.

3. Women, especially athletes, in my sport still receive far less pay than men in different roles.

A little over half, 50.7% (16.7% quite well and 34% to a very large degree) of respondents agreed that women, especially athletes, receive far less pay than men in different roles in their sport. 31.9% (9% very little and 22.9% somewhat) of the respondents moderately agreed to the proposition and only 17.4% did not agree that women receive far less than men in different roles of their sport.

4. "Othering" of women´s sports reinforce stereotypes against women.

Over half of the respondents 53.2% (13.2% very little and 41% somewhat) moderately agreed that describing women´s sport as the "other" does reinforce stereotypes against women. 30.6% (16% quite well and 14.6% to a very large degree) agreed with the proposition while 15.3% did not agree that othering does reinforces stereotypes.

5. The institutionalisation of equal funding and remuneration for male and female sports will boost media interest in female sport.

65.3% (29.2% quite well and 36.1% to a very large degree) agreed that the institutionalisation of equal funding and remuneration of male and female sport will boost media interest in female sport. 6.3% and 22.2% agreed that this will moderately do and only 6.3% disagreed that institutionalising equal allocation of resources will boost media interest in female sport.

6. Support structures in sport organisations for dual career and work-life balance initiatives encourage women to continue sport careers.

55.6% (15.3% quite well and 40.3% to a very large degree) agreed that sport organisations need to establish dual career and work-life balance support structures for women to support their career progress at all levels. 29.1% (8.3% very little and 20.8% somewhat) also moderately agree and only 15.3% disagreed that this approach will help advance the progress of women´s careers in sport.

Factor Analysis

A factor analysis was conducted on the facilitators and constraints variables of the sample of 144 respondents. Out of the 14 variables for the facilitators on the sample, six variables were dropped due to low communality and the final analysis included eight variables. The Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy for the analysis at (KMO=.792) as the KMO is above .7 threshold. The Barlett's test of sphericity suggested an approximate chi square of 368.023 with 45 degrees of freedom and a significant p-value (p≤.001). The scree plot was ambiguous and indicated inflexions for two, three, or four variables. Three factors were identified. All had eigenvalues above 1. In combination, the three factors explained 60.25% of the variance. The communalities of all items were above the .5 threshold. The rotated factor solution clearly suggested three factors. The first factor represented a career facilitator with three items and factor loadings ranging from .686 (Q1_FAC_Intra3) to .837 (Q1_FAC_Intra2). The second factor can be described as structural facilitators and consists of four items. The third factor (interpersonal facilitator) was not included due to lack of sufficient reliability level.

With regards to the constraints, out of 15 variables, two variables were dropped due to issues of low communality so that the final analysis included 13 variables. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis (KMO=.900) as the KMO is above .7 threshold. Barlett's test of sphericity suggested an approximate chi square of 835.211 with 78 degrees of freedom and a significant p-value (p≤.001). The scree plot was ambiguous and indicated inflexions for two, three, or four variables. Three factors were identified. All had eigenvalues above 1. In combination, the three factors explained 64.07% of the variance. The communalities of all items were above the .5 threshold.

The rotated factor solution clearly suggested three factors. The first factor representes a career constraint with three items and factor loadings ranging from .052 (Q4_CONS_Intra5) to .850 (Q6_CONS_Struc6).

Reliability

Similarly, a reliability Cronbach Alpha test was conducted on the same sample to determine the extent to which the items on the questionnaire are related to each other. This provides an overall index on the internal consistency of the questions and if there are items or questions that should be excluded from the analysis.

The intrapersonal and structural facilitators indicated a Cronbach´s Alpha of .743 which was greater than the .70 threshold and indicated a greater consistency of the variables in the scale. A similar test was also conducted for the constraints which indicated a Cronbach´s Alpha of .887 which was also greater than the threshold and indicated a greater consistency of the variables.

Correlation

Subsequently, a two-tailed bivariate (measure the association between two variables) persons correlation analysis was conducted on the sample of 144 respondents to determine whether a relationship exist between variables and then determine magnitude and action of the relationships. A correlation was conducted on all variables and the factors but only the positive and significant relationships are reported.

Years of experience and career facilitators were found to be positively and significantly correlated (r=.182, p=.028). This finding indicates that an increase in years of experience will lead to higher career facilitators for women in sport.

Years of experience and interpersonal constraints were positively and significantly correlated (r=.174, p=.037). This finding indicates that an increase in years of experiences also leads to higher interpersonal constraints women are faced with.

Age of women and favouritism and unwritten rules always hinder women's advancement and reserve certain positions for men sport are found to be positively and significantly correlated (r=.176, p=.035). This finding indicates that as women get older in their sport, the more they experience favouritism and unwritten rules that favours men.

T-test

On average, individuals having a license believe that a good sport career influenced people to include and accept them in their sport as a woman (m=3.13) than those having no license (m=3.76). This difference was significant t(142)=2.204, p=.029. The difference represented a medium-sized effect d=.485.

On average, women with licenses believe that it is important to have women-only training and development courses/programmes to support aspiring young women in different areas of the sport (*m*=3.13) than those not having a license (*m*=3.16). This difference was significant *t*(142)=2.204, *p*=.029 and represented a medium-size effect *d*=.485.

Women with a license believe that stakeholders need to take a central role to ensure that the sport´s values and those of the organisation regarding the participation of women are congruent and promote equality (*m*=3.13) than those without a license (*m*=3.76). This difference was significant *t*(142)=2.204, *p*=0.29, which represented a medium size effect of *d*=.485.

Women coaches and technical officials believe that stakeholders need to take a central role to ensure that the sport´s values and those of the organisation regarding the participation of women are congruent and promote equality (*m*=2.93) than referees and umpires (*m*=4.11). This difference was significant *t*(36)=2.463, *p*=0.019, which represented a medium size effect of *d*=.940.

On average, young women referees have more role models that provide complementary skills that serve as job attractors (*m*=4.51) than women coaches (*m*=3.44). This difference was significant *t*(36)=-4.037, *p*=-0.01, which represented a medium-size effect *d*=-1.540.

On average there are less Male Equity Champions in coaching/technical officials (*m*=3.11) than in both administration/leadership and refereeing/umpires (*m*=3.34). This difference was not significant *t*(36)=-.532, *p*=0.604, which represented a medium size effect *d*=0.199.

Women in administration/leadership are faced with favouritism and unwritten rules that always hinder women's advancement and reserve certain positions for men in sport (*m*=4.750) than does women in refereeing (*m*=2.827) This difference was significant *t*(31)=2.572, *p*=0.015, which represented a medium size effect *d*=1.372.

Women in administration feel more pressure for being a woman which undermines their performance (*m*=3.000) than do women athletes (*m*=1.589). This difference was significant *t*(80)=3.154, *p*=0.002, which represented a medium size effect *d*=1.617.

Icebreakers

Below is a graphical representation of the statements made by the respondents on the three words that first came to their mind when "women sport" is mentioned or heard. The highest cumulative mean percentages are added to the graph.

Words that respondents associate with women sport
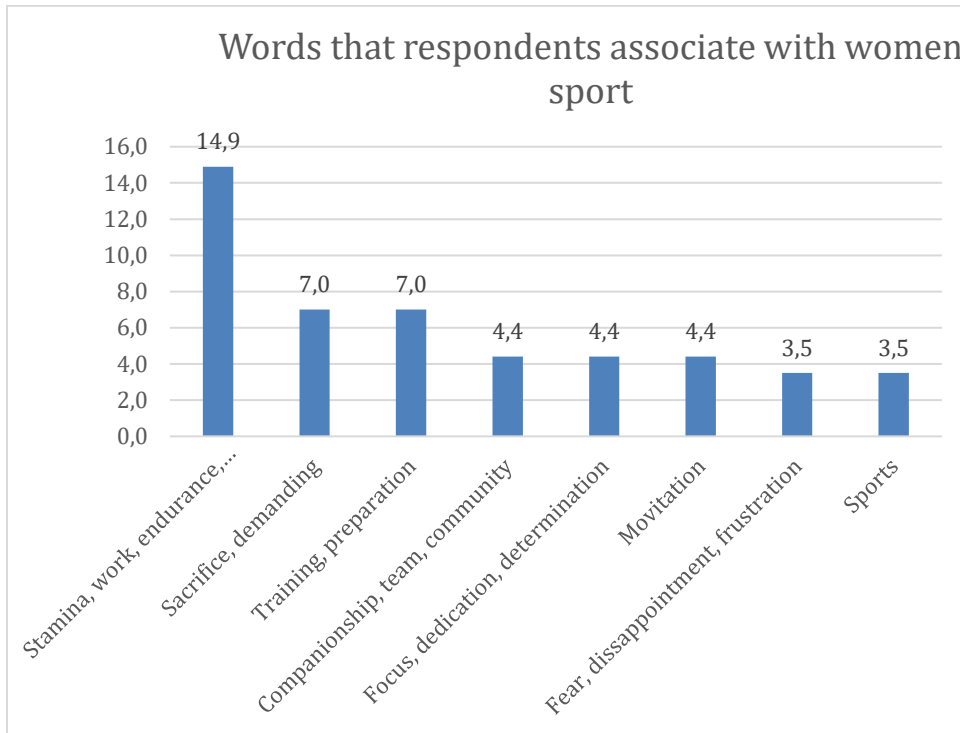
4. Conclusions

The findings demonstrate the need to equip women of all age groups with the skills to enhance their effective participation. Though it is evident that women in certain areas of sport are provided with some support on knowledge and skills development, this is still limited in many other areas of sport in the European Union. There is a complex relationship between coaching and requirements for competent leadership in sport organisations. This, therefore, requires that there should be a specific focus on gender differences to address women-specific challenges.

There is a need to address the retention of women in different areas of their sport. The large pool of athletes in certain sport is not proportional to the percentage of women in other areas of that sport, like in leadership, coaching and refereeing. Structural support systems like mentoring role model support systems need to be provided for younger women in all sports.

The need for policy frameworks that challenge sport organisations at all levels to promote cultures of innovation and inclusive practices. Reward and punishment strategies for sport organisations would accelerate the implementation of gender equal opportunities in the sport setting. EU and national level policies to increase the participation of women would also increase the level of awareness on the still evident gender gaps existent at all levels of sport.

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6. Graphics

Facilitators
Intrapersonal
1. A good sport career has influenced people to include and accept me in my sport as a woman.
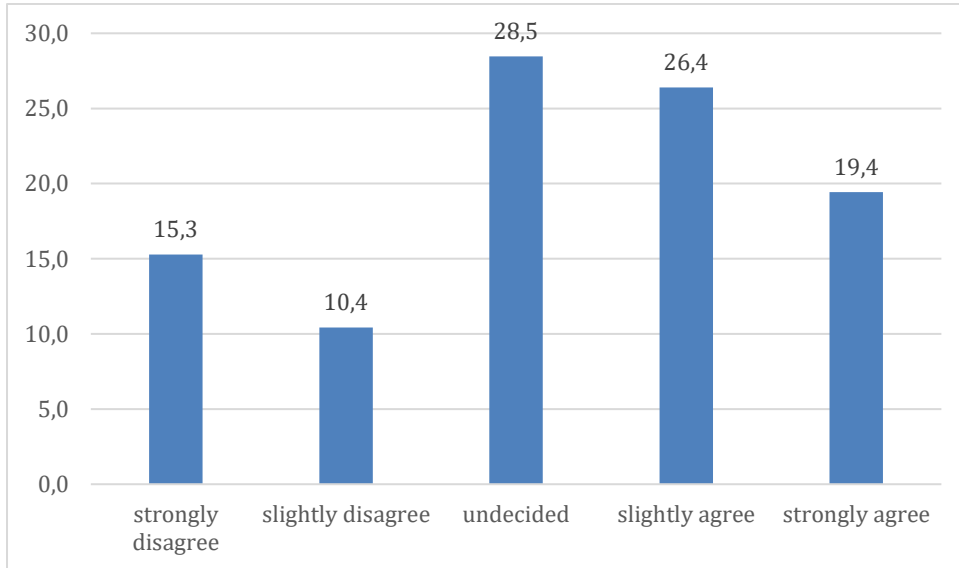
Figure 1: Influence of sport career on acceptance in sport.
Over 28.5% of respondents were undecided regarding the influence of a successful sport career on their acceptance in the sport. 26.4% slightly agreed and 19.4% strongly agreed. However, 15.3% of the respondents strongly disagreed to this proposition and 10.4% slightly disagreed.

2. My love for my sport motivates me to stay and support the development of the sport.
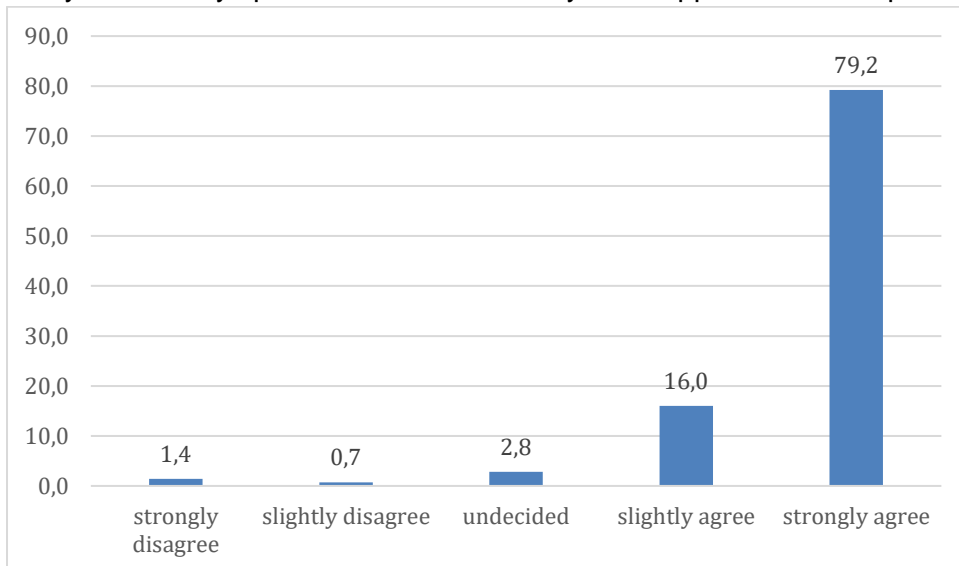
Figure 2: Love for sport as motivation to stay and support development of sport.

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79.2% of the respondents agree that the love for their sport is a strong motivation to stay in the sport and support its development and an additional 16% also slightly agreed. Only 1,4% strongly disagreed to this and another 0,7% slightly disagreed and 2,8% were undecided on this proposition.

3. My intentions to be a role model status for younger women motivates me to stay and succeed in my sport.
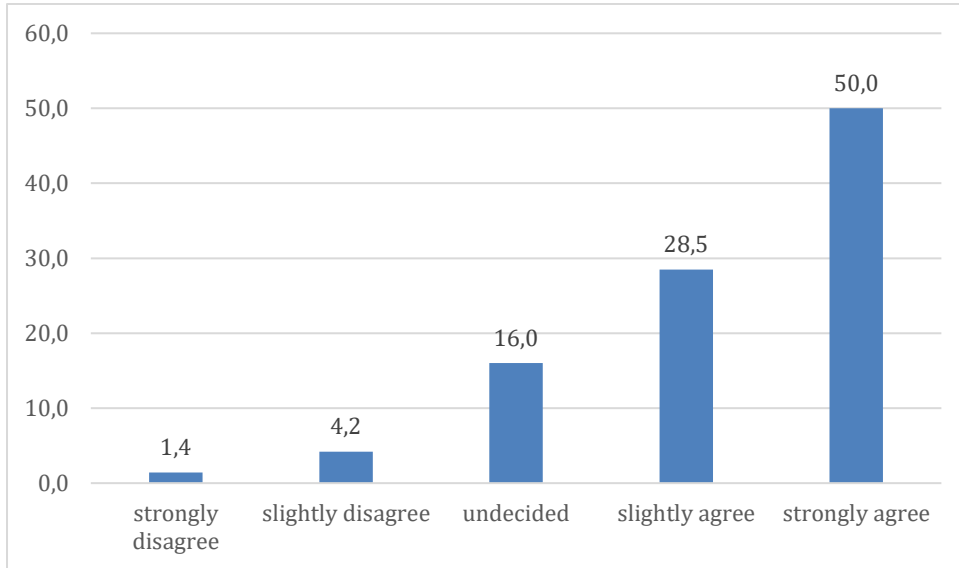
Figure 3: Intentions to be role models motivates them to succeed in their sport.

50% of the respondents strongly agree that aspiring for a role model status for other young women serves as a strong motivation to stay and succeed in their respective sport. 28.5% also slightly agree to this and 16% were undecided. 4.2% slightly disagreed and 1.4% strongly disagreed to the proposition.

4. I problematise the inclusion of women in my sport and that has helped changed the status quo.

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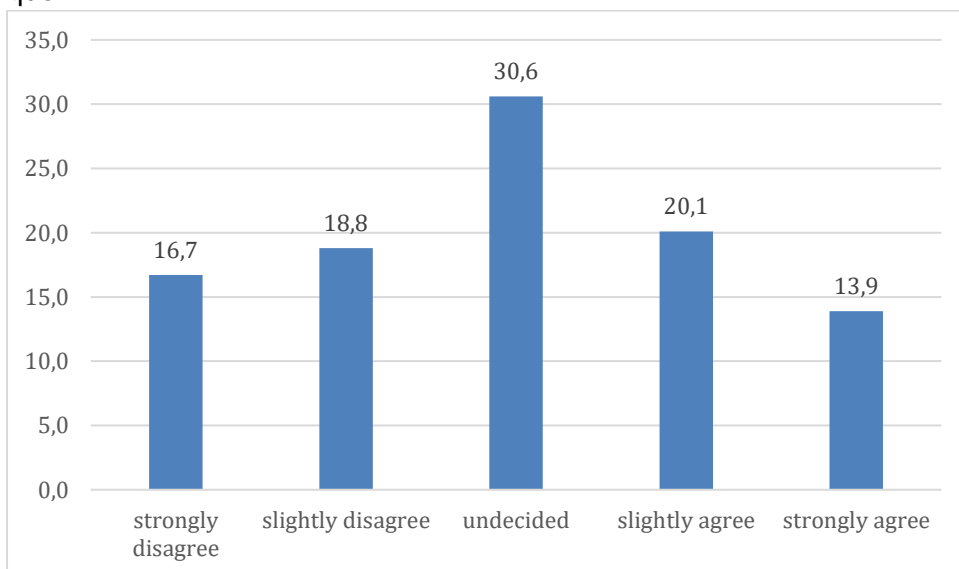
Figure 4: Problematising the inclusion of women in sport helped change the status quo. 30.6% of the respondents were undecided regarding problematising inclusion of women and 34% agree to this preposition (20.1% slightly agree and 13.9% strongly agree). However, 35.5% disagreed to problematising the inclusion of women in their sport (18.8% slightly disagree and 16.7% strongly disagree).

Interpersonal

1. Women need offers to mentorship and career development opportunities from fellow women in their sport.
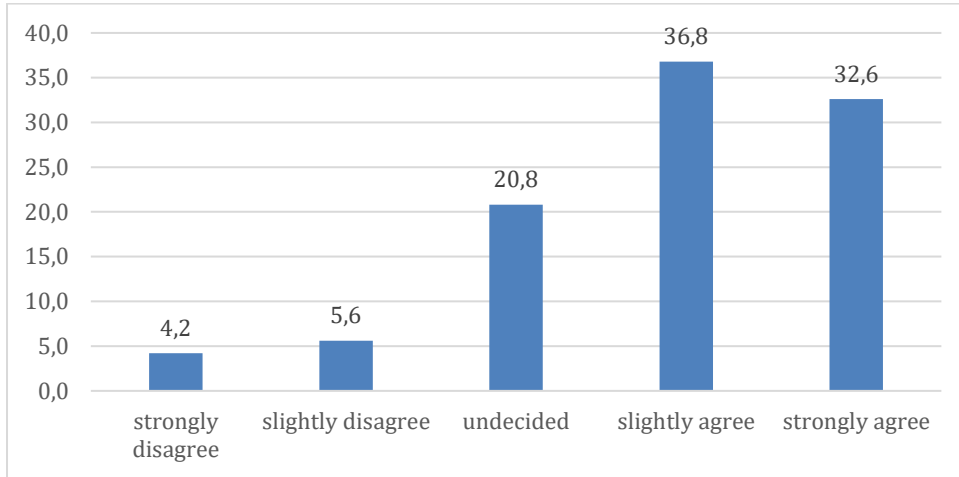
Figure 5: Offers of mentorship and career development by fellow women.
36.8% slightly agree and 32.6% strongly agree to the need for offers of mentorship and career development opportunities by other women. 20.8% of respondents were undecided and only 5.6% slightly disagreed and 4.2% strongly disagreed.

2. The presence of "Male Equity Champions" in a sport strengthens the advancement and acceptance of women in the environment.
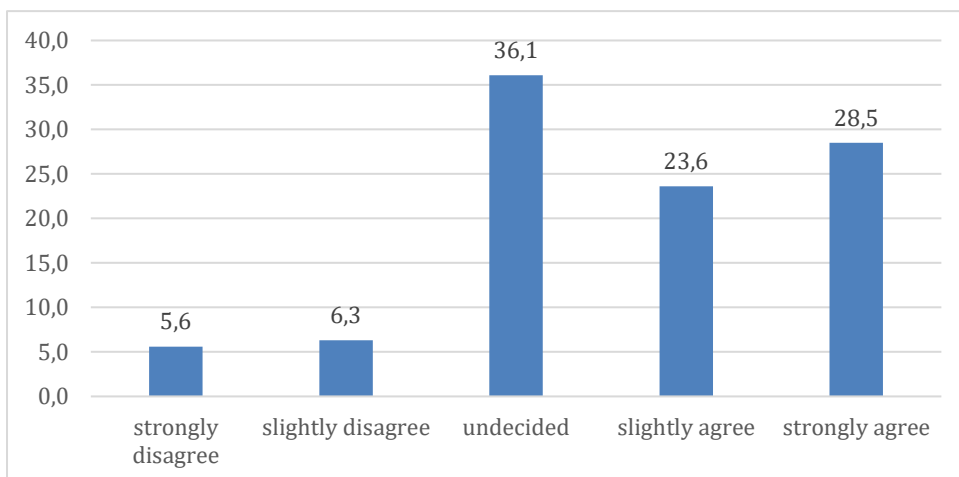
Figure 6: Presence of "Male Equity Champions" strengthens the acceptance of women in sport.

Majority of respondents 36.1% were undecided. 5.6% strongly disagree and 6.3% slightly disagree that the presence of Male Equity Champions will strengthen the acceptance and advancement of women in sport. Over all 52.1% (23.6% slightly agree and 28.5% strongly agree) agrees that the presence of Male equity champions will help the acceptance and advancement of women in sport.

3. The existence of family and close network support structures is important for career advancement in competitive sport.
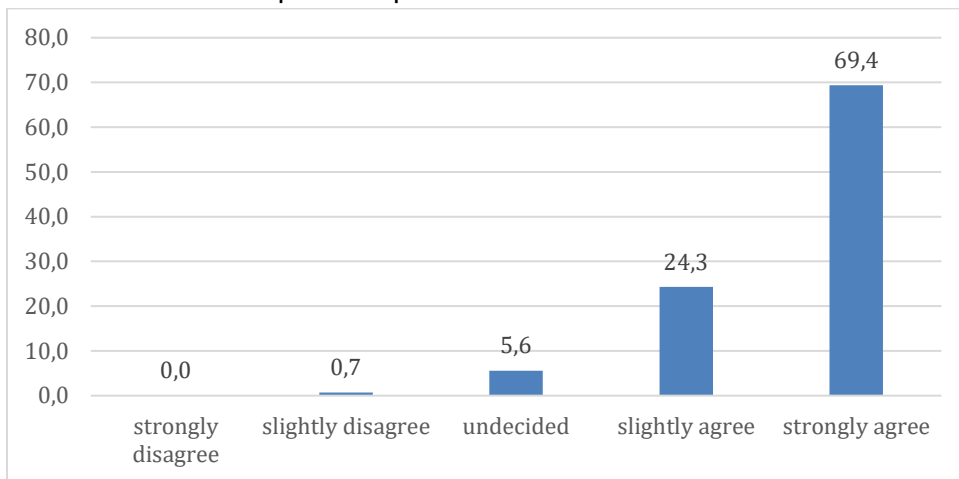
Figure 7: Family and close network support structures are important for career advancement.

An overall 93.7% (24.3% slightly agree and 69.4% strongly agree) agree that family and network support structures for women is important for career advancement in competitive sport. Only 5.6% of respondents are undecided regarding this proposition and 0.7% slightly disagrees and no respondent strongly disagrees.

4. Role models provide complementary skills that serve as job attractors.
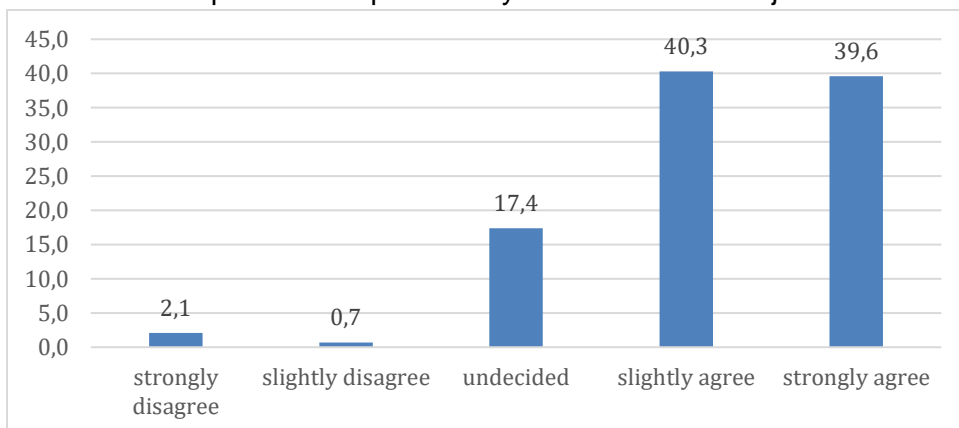
Figure 8: Role models provide complementary skills necessary for job attraction.

In total 79.9% (40.3% slightly agree and 39.6 strongly agree) of respondents agreed that the availability of role models provide an opportunity for young women to acquire

complementary skills that will serve as job attractors in the future. Only 17.4% of the respondents were undecided regarding this proposition. 0.7% slightly disagree and 2.1% strongly disagree.

Structural

1. It is important to have women-only training and development courses/programmes to support aspiring young women in different areas of the sport.
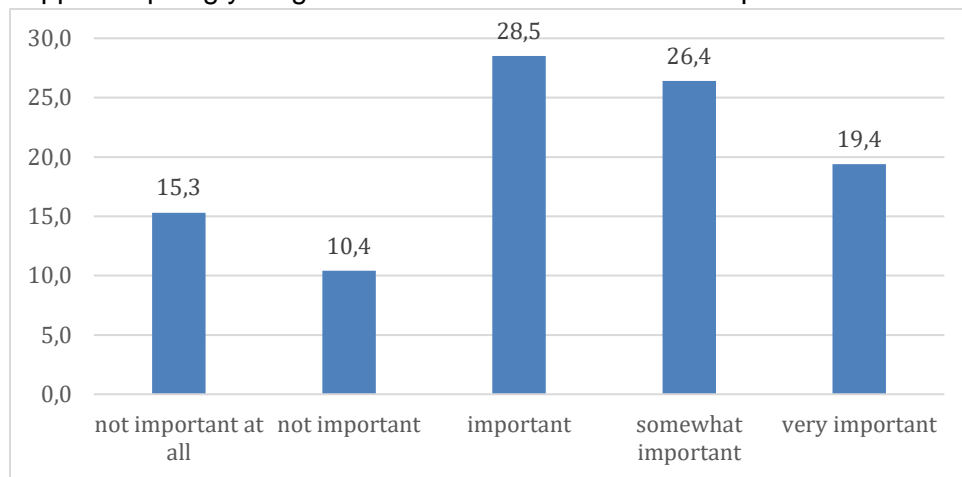
Figure 9: Importance of having women-only training and development courses to support aspiring young women.

74.3% of respondents we found it important to provide a women-only training and development programmes/courses to support young and aspiring women in different areas of the sport. 25.7% did not find it important to provide this within the structures of the sport organisations.

2. To avoid discrimination against women during recruitment processes, explicit legal prohibitions on discrimination against women should be included in the organisation´s legal documents.
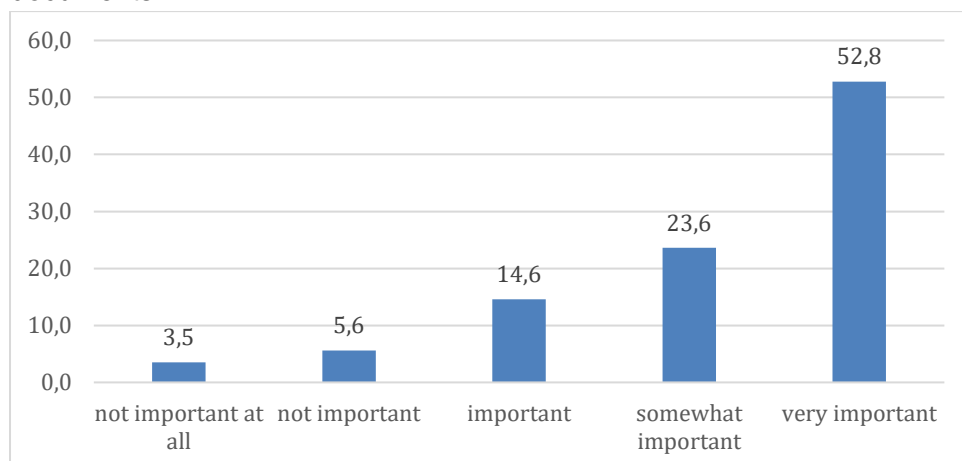
Figure 10: Legal prohibitions against discrimination should be included in organisation´s legal documents.

About 91% of respondents agree that it is important that sport organisations have legal
prohibitions against discrimination in their legal documents to avoid discrimination against
women during recruitment processes. On the contrary, only 9% of the respondents did not
find this important.

3. Stakeholders need to take a central role to ensure that the sport´s values and those of the
organisation regarding the participation of women are congruent and promote equality.
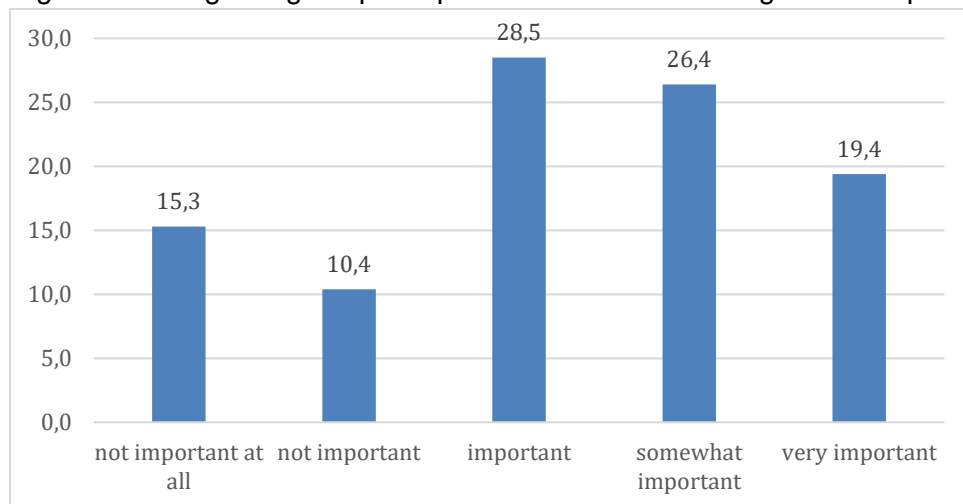
Figure 11: Importance of stakeholders taking central role to promote participation of women
in their organisations.

74.3% of the respondents agree that it is important that stakeholders take a central role in
promoting the participation of women and promotion equality in their organisations. About
25.7% of respondents did not agree on the importance of this role of the stakeholders.

4. A quota system is necessary on all national sport organisations and its adherence should
be rewarded with certification by a national government authority.
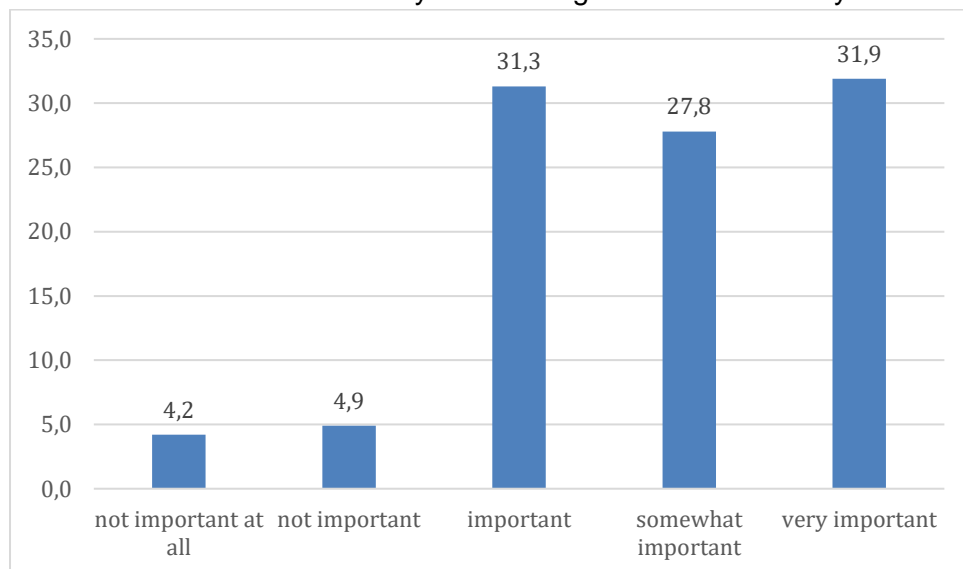
Figure 12: Importance of having quota systems and reward for it by a national government
authority.

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91% of respondents agree that it is necessarily important for all national sport organisations to have gender quota systems and that the adherence to this principle should be rewarded with a certification by a national government authority. Only 9% of the respondents did not find this approach important to increase the participation of women in sport.

5. Female role models in sport should be exemplified in society and the media.
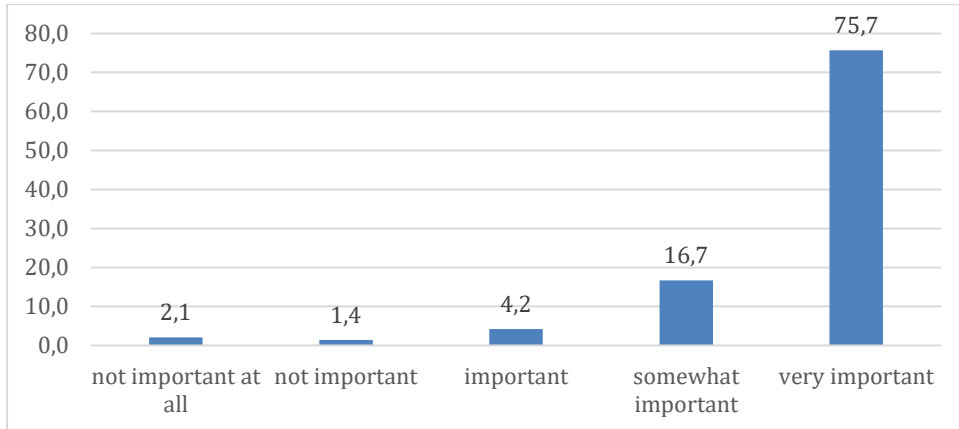
Figure 13: Female role models should be exemplified in society and the media.

A total of 92.4% of the respondents agree that it is important for female role models in sport to be exemplified in society and the media to increase the participation of women in sport. Only 7.6% did not agree that this approach is important to increase the participation of women in sport.

6. Gender equality should be a key requirement in any new discipline being developed in any sport.
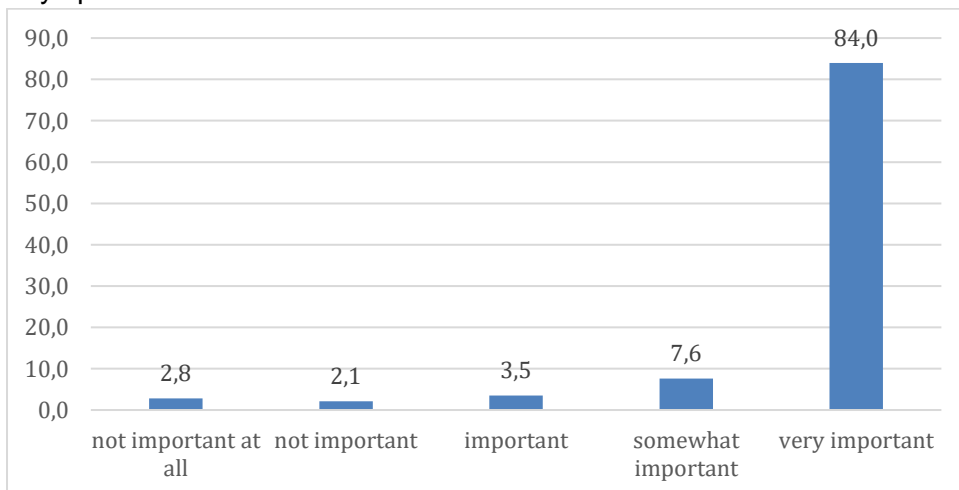
Figure 14: Gender equality should be a key requirement in any new sport discipline being developed.

95.1% of women agree that it is important that gender equality is considered as a key requirement in any new sport discipline being developed to increase the participation of women in sport. Only 4.9% of women did not agree that this is important.

Constraints

Intrapersonal

1. I feel like an outsider in my sport.
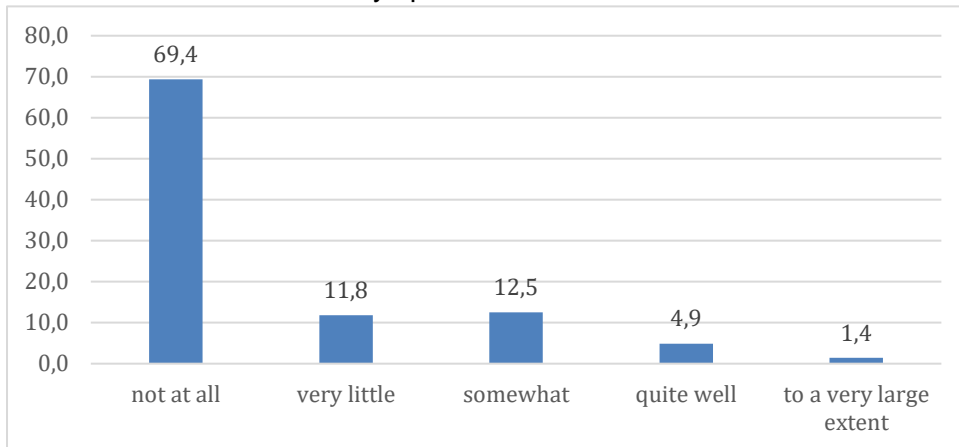
Figure 15: I feel like an outsider in my sport.

About 69.4% of women do not agree that they feel like outsiders in their sport by virtue of being women. 24.3% (11.8% very little and 12.5% somewhat) feel a bit like outsiders and only 6.3% agree that they feel so.

2. I feel like I need to or work more than men to earn my place as a woman.
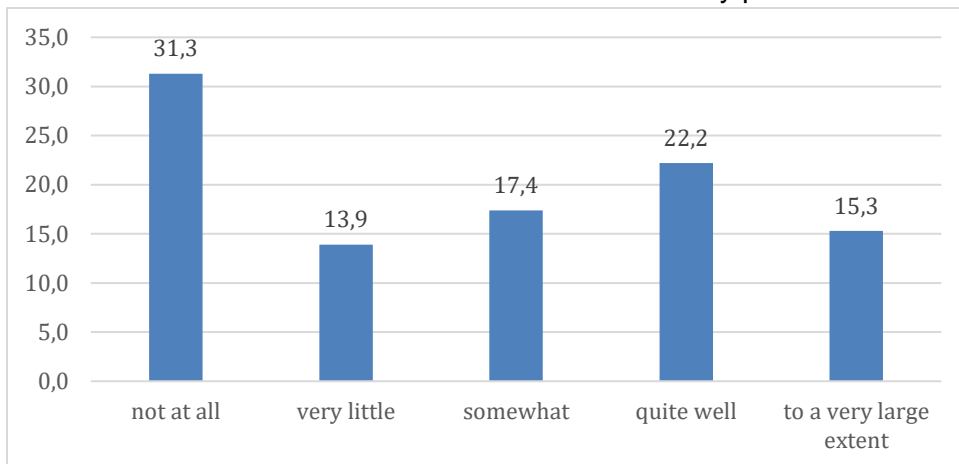
Figure 16: Women feel like they need to or work more than men to earn their place in the sport.

37.5% (22.2% quite well and 15.3% to a very large extent) of women responded that they feel like they need to or work more than men to earn their place in their sport. 31.3% (13.9% very little and 17.4% somewhat) experience this feeling at a moderate level and 31.3% do not agree to the proposition.

3. I have become self-reflexive to avoid sexism because of my male-dominated environment.
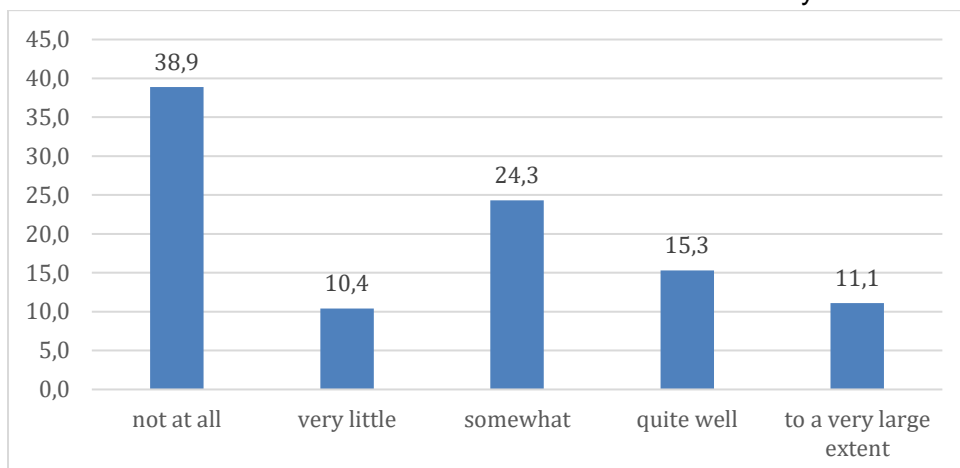
Figure 17: Become self-reflexive to avoid sexism in male-dominated environment.
38.9% of women do not agree that they become self-reflexive to avoid sexism because they are in male-dominated environment. 34.7% of respondents moderately considered this true while 26.4% agreed that they become self-reflexive to avoid sexism in male-dominated environments.

4. The pressure I feel for being a woman undermines my performance.
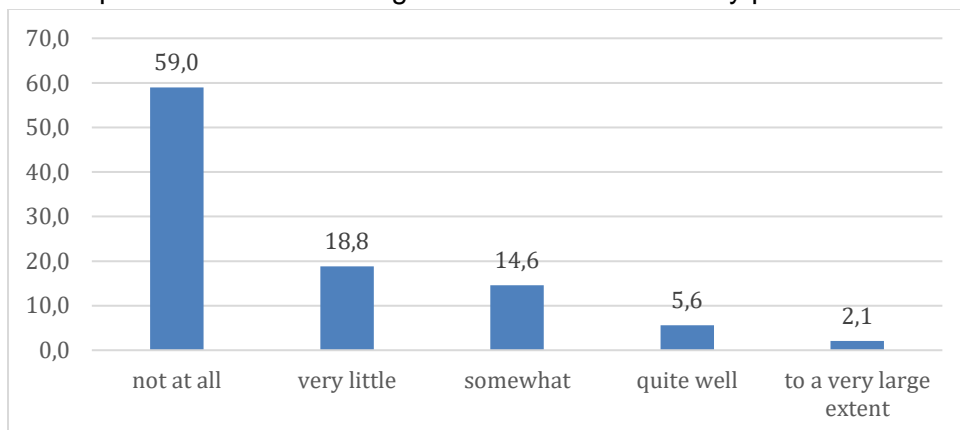
Figure 18: Feeling of pressure for being a woman undermines performance.
Over half of the respondents, 59%, did not agree that they feel pressure for being women and that undermines their performance in their respective roles in their sport. Only 7.7% (5.6% quite well and 2.1% to a very large extent) of the respondents agree that this does happen. The remaining 33.4% (18.8% very little and 14.6% somewhat) of the respondents moderately agree to having this experience.

5. I adopt a non-threatening role due to an evident lack of knowledge and misconception of gender equality initiatives by some men.

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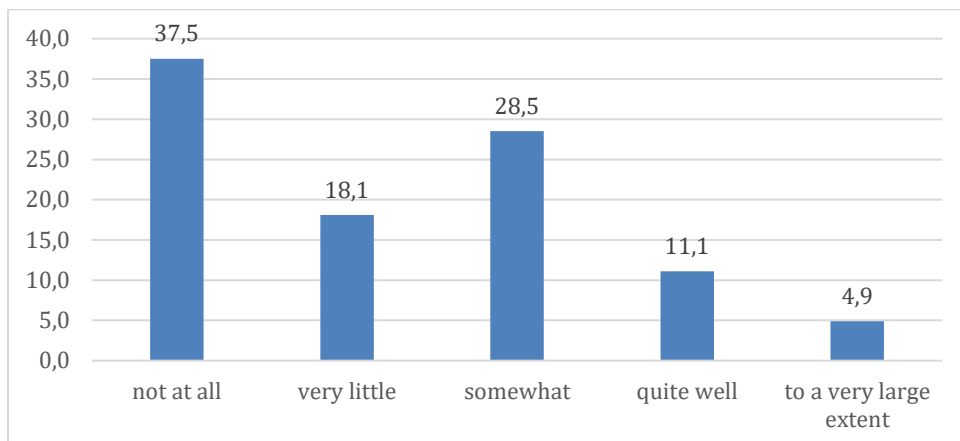
Figure 19: Adoption of a non-threatening role due to misconceptions of gender equality initiatives by some men.

37.5% of women that filled out the questionnaire did not agree that they adopt a non-threatening role due to misconceptions of gender equality initiatives by some men and 46.6% (18.1% very little and 28.5% somewhat) agree that they moderately adopt this position. However, only 16% (11.1% quite well and 4.9% to a very large extent) of the respondents agree that they adopt this role in their sport.

Interpersonal

1. Favouritism and unwritten rules always hinder women's advancement and reserve certain positions for men in my sport.
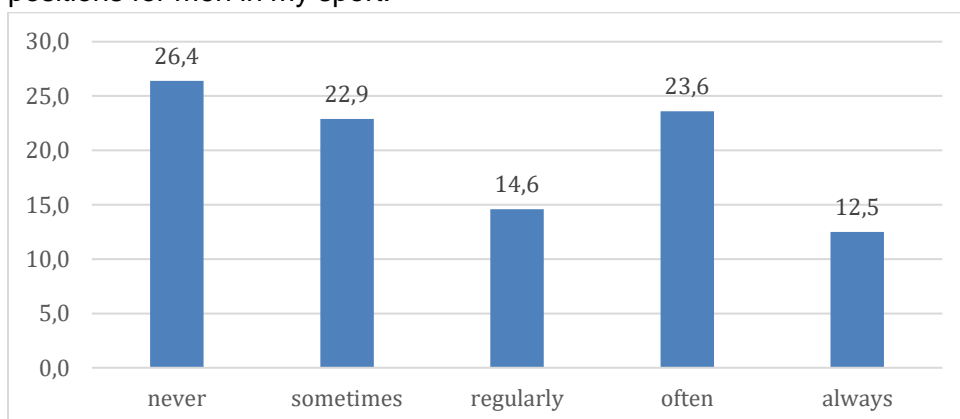
Figure 20: Favouritism and unwritten rules hinder women´s advancement in sport.

36.1% (23.6% often and 12.5% always) agree that certain positions in their sports are reserved for men and that favouritism and unwritten rules hinder women´s advancement. However, 26.4% of respondents did not agree to this proposition. 37.5% (22.9% sometimes and 14.6% regularly) moderately agree to this proposition.

2. In my interactions, dominant male language is still evident in my sport's manuals, rules, and structures.

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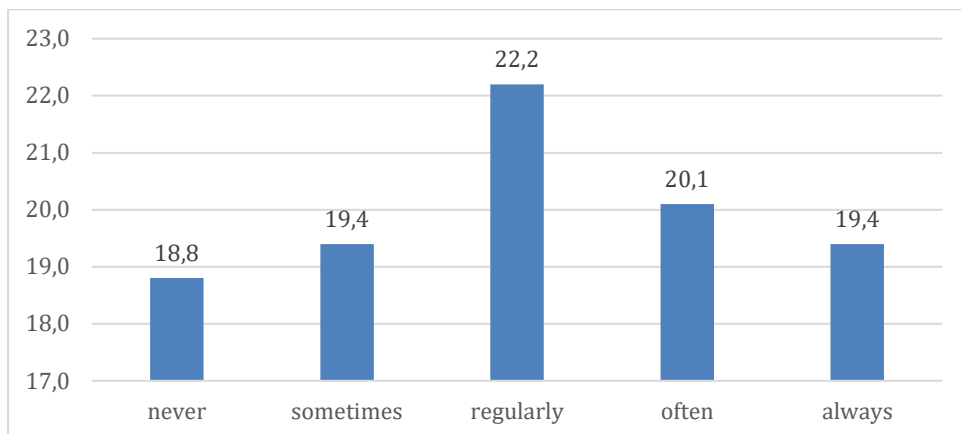
Figure 21: Dominant male language is still evident in sport rules, manuals, and structures. Only 18.8% of respondents do not agree that in their interactions in their sport, dominant male language is still evident in sport manuals, rules, and structures. The overwhelming majority 81.2% (19.4% sometimes, 22.2% regularly, 20.1% often and 19.4% always) agree that dominant male language is still evident in sport rules, manuals, and structures of sport organisations.

3. Dominant male knowledge of the sport is still used to judge competencies, which directly disadvantages women in my sport.
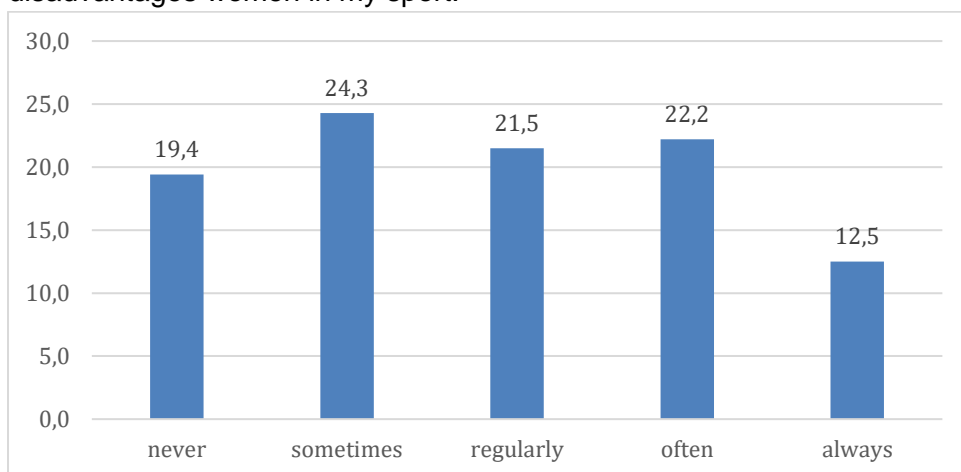
Figure 22: Dominant male knowledge is used to judge competencies which disadvantages women.
Even though the results of this proposition seem even, only 19.4% did not agree that dominant male knowledge is used to judge competences in their sport which disadvantages women. The majority, 80.6% (24.3% sometimes, 21.5% regularly, 22.2% often and 12.5% always) agree that this does happen in their sport.

4. In my interactions with others, I realised that merit is easily replaced and justified by social conceptions of gender differences in my sport.
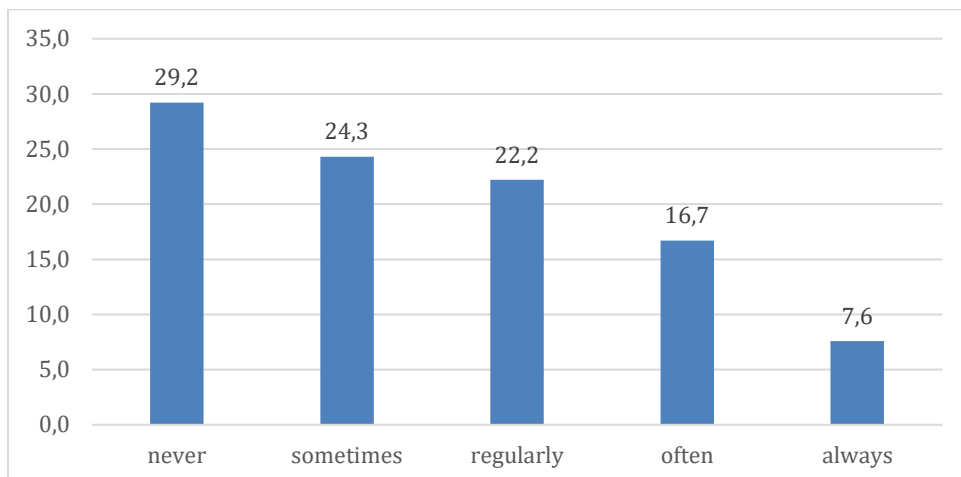
Figure 23: Merits are replaced and justified by conceptions of gender differences in sport. 29.2% of respondents did not agree that merits are replaced and justified by conceptions of gender differences in their sports. 70.8% (24.3% sometimes, 22.2% regularly, 16.7% often and 7.6% always) of respondents agreed that this does happen in their sport.

Structural

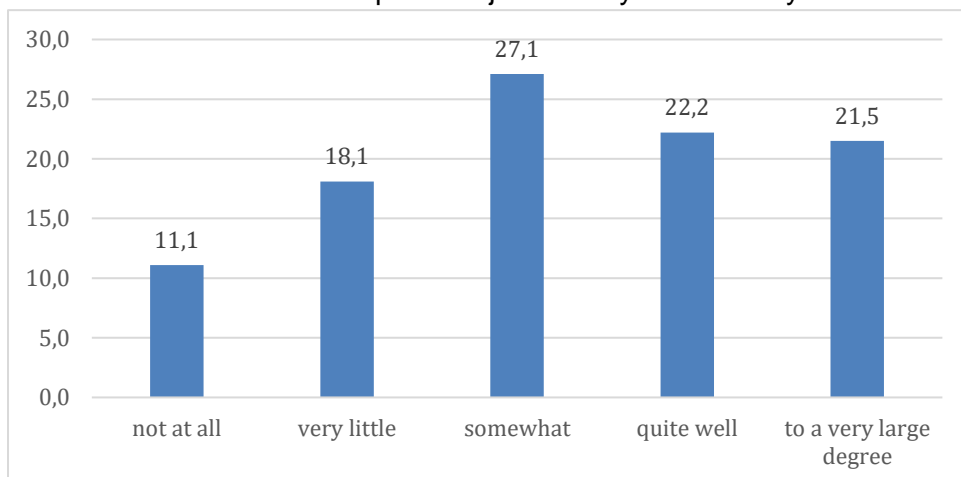1. Women are faced with a quite low job stability and security in various aspects of my sport.

Figure 24: Women are faced with low job stability and security in various aspects of their sport.

43.7% (22.2% quite well and 21.5% to a very large degree) of respondents agree that women are faced with quite low job stability and security in various aspects of their sport. The other 45.2% moderately agree to this proposition and only 11.1% disagreed that women are faced with low job stability and security in their sport.

2. Male sport disciplines are considered as the norm and women´s disciplines emulate the male discipline's terminologies, knowledge, and ideologies of the sport.
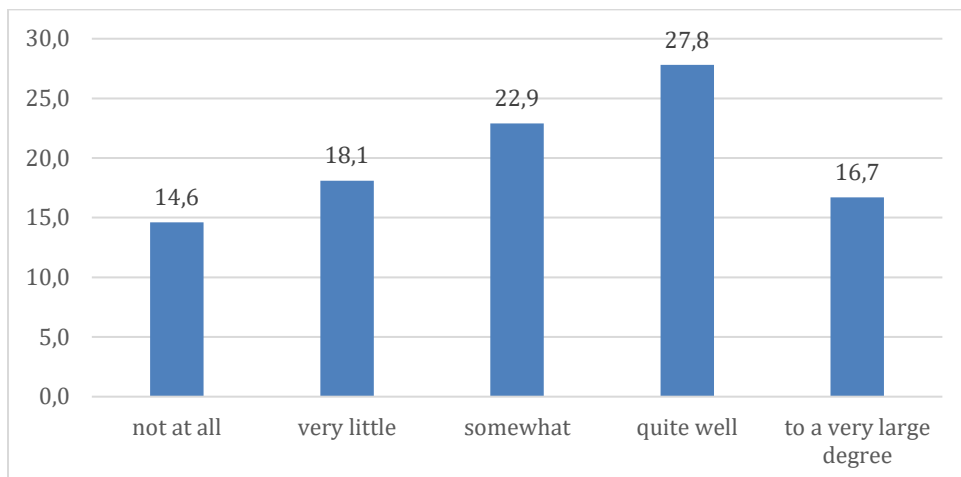
Figure 25: Male sports disciplines are considered as the norm and women´s disciplines emulate the male terminologies, knowledge, and ideologies.
14.6% of respondents did not agree while 41% (18.1% very little and 22.9% somewhat) moderately agree and 44.5% (27.8% quite well and 16.7% to a very large degree) agreed that male sport disciplines are the norm and women´s disciplines emulate the male terminologies, knowledge, and ideologies.

3. Women, especially athletes, in my sport still receive far less pay than men in different roles.
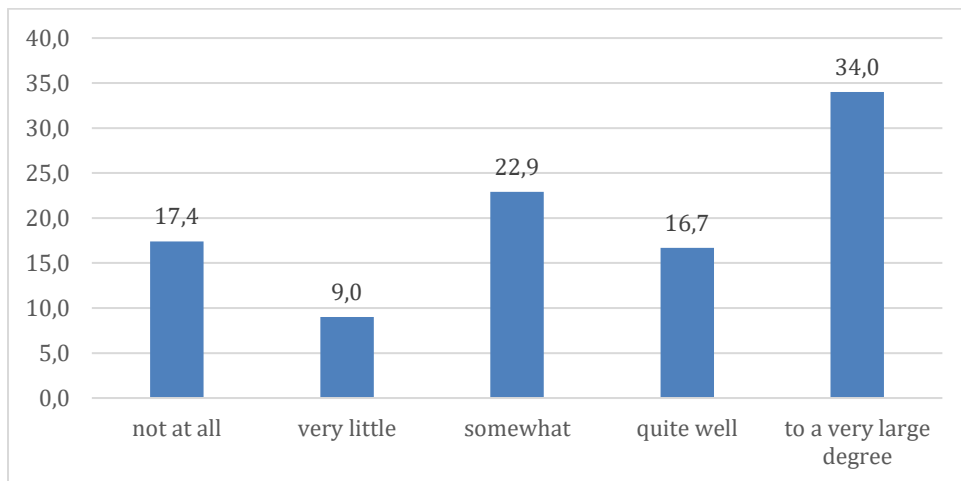
Figure 26: Women, especially athletes, receive far less pay than men in different roles.
A little over half, 50.7% (16.7% quite well and 34% to a very large degree) of respondents agreed that women, especially athletes, receive far less pay than men in different roles in their sport. 31.9% (9% very little and 22.9% somewhat) of the respondents moderately agree to the proposition and only 17.4% did not agree that women receive far less than men in different roles of their sport.

4. "Othering" of women´s sports reinforce stereotypes against women.

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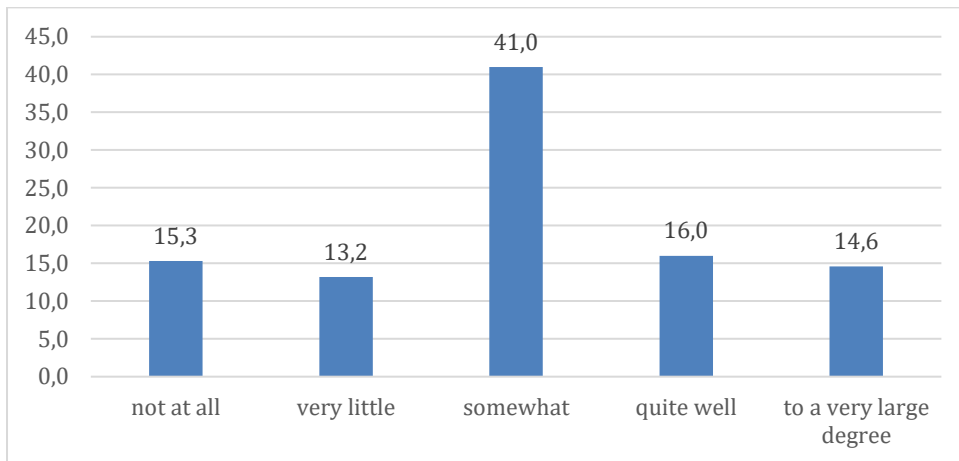
Figure 27: "Othering" of women´s sports reinforce stereotypes against women.
Over half of the respondents 53.2% (13.2% very little and 41% somewhat) moderately agree that describing women´s sport as the "other" does reinforce stereotypes against women. 30.6% (16% quite well and 14.6% to a very large degree) agree with the proposition while 15.3% did not agree that othering does reinforces stereotypes.

5. The institutionalisation of equal funding and remuneration for male and female sports will boost media interest in female sport.
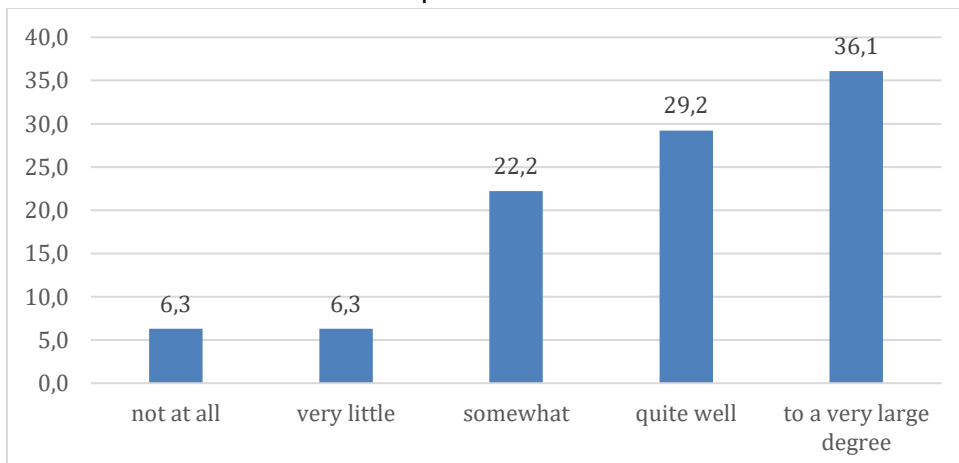
Figure 28: Institutionalising equal funding and remuneration of male and female sport will boost media interest in female sport.
65.3% (29.2% quite well and 36.1% to a very large degree) of women agreed that the institutionalisation of equal funding and remuneration of male and female sport will boost media interest in female sport. 6.3% and 22.2% agrees that this will moderately do and only 6.3% disagreed that institutionalising equal allocation of resources will boost media interest in female sport.

6. Support structures in sports organisations for Dual career and work-life balance initiatives encourage women to continue sports careers.
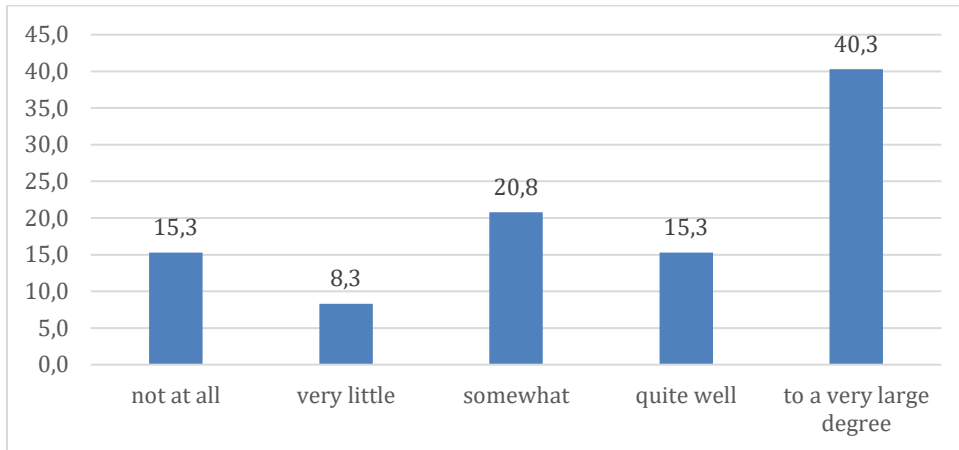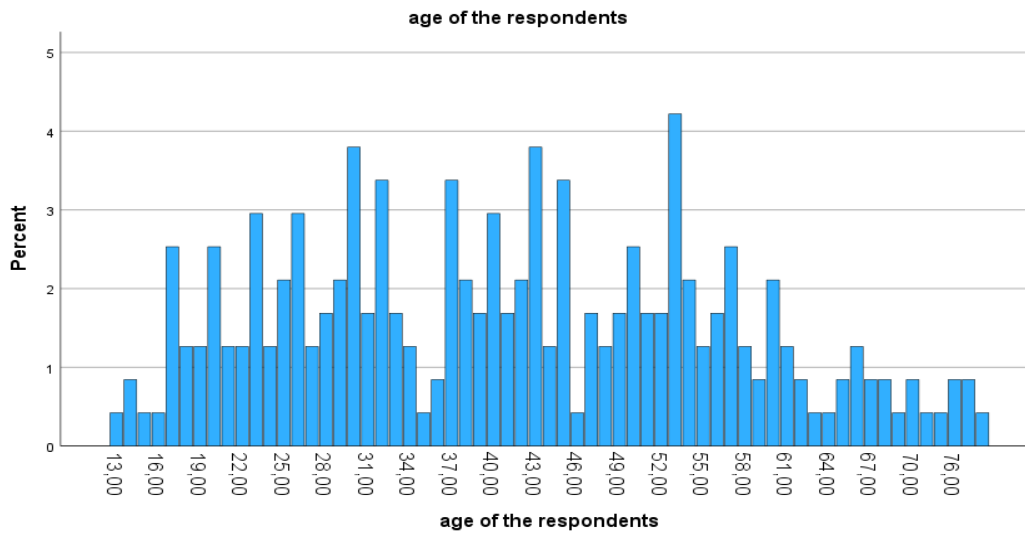
Figure 29: Sports organisations need to establish dual career and work-life balance support structures for women to support their career progress.
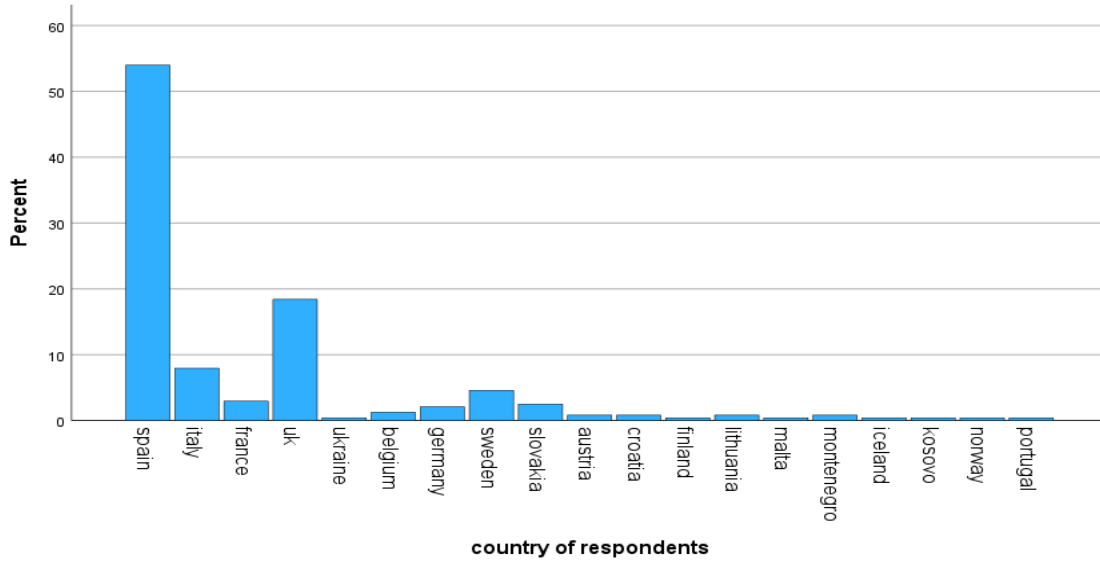
55.6% (15.3% quite well and 40.3% to a very large degree) of the respondents agree that sport organisations need to establish dual career and work-life balance support structures for women to support their career progress at all levels. 29.1% (8.3% very little and 20.8% somewhat) also moderately agree and only 15.3% disagreed that this approach will help advance the progress of women´s careers in sport.
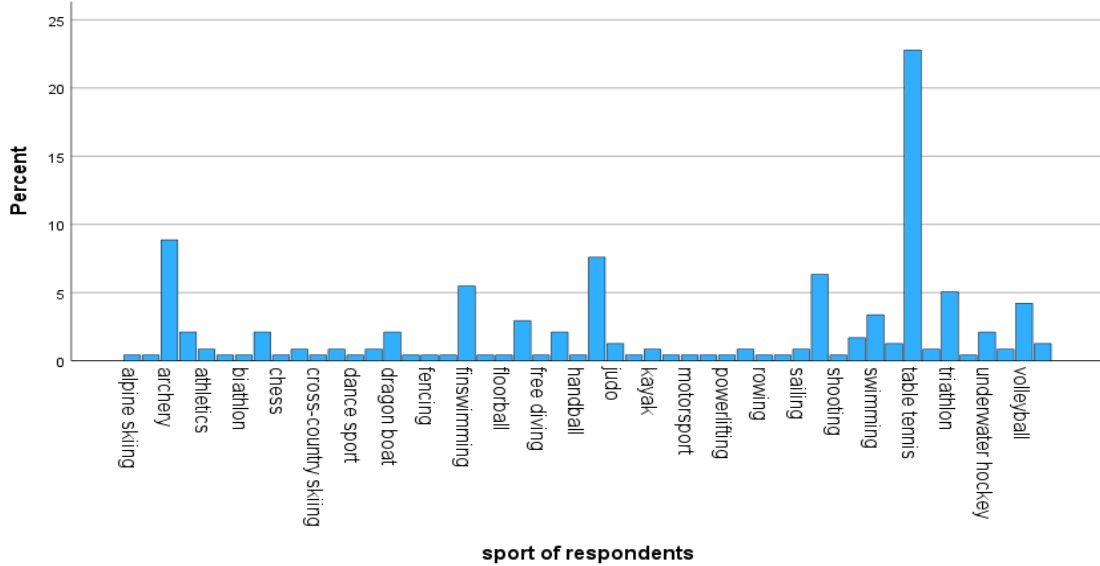
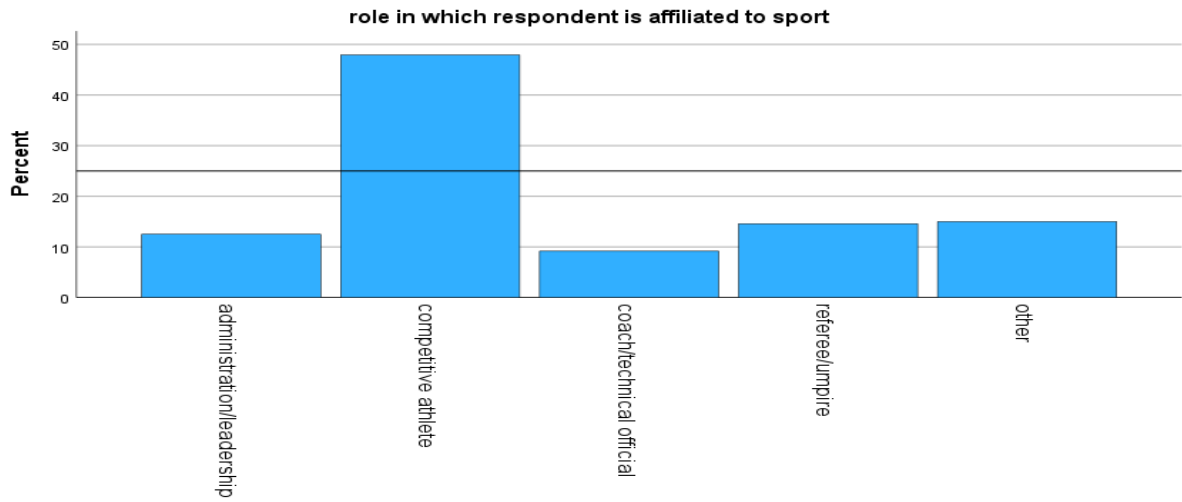## Age of respondents

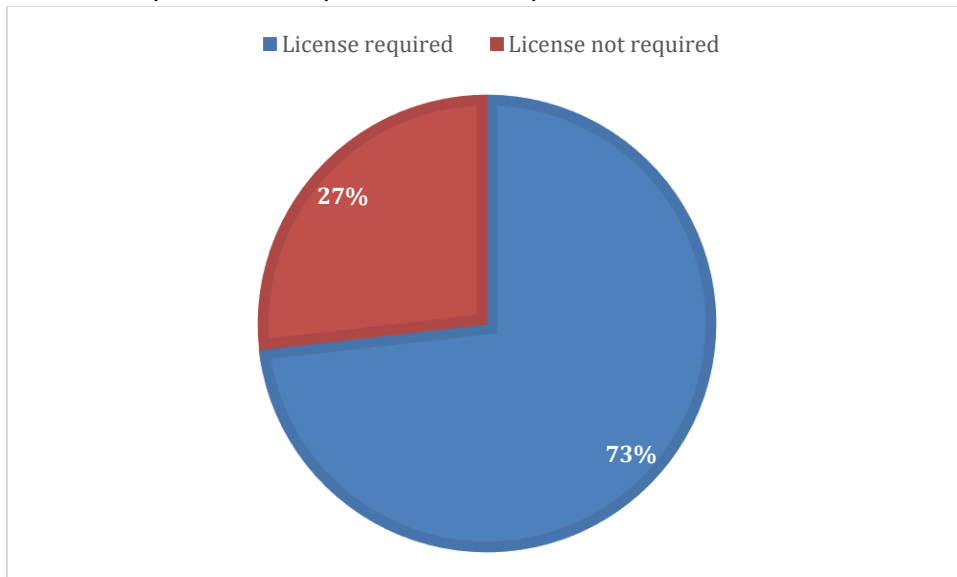## Country of respondents

Sport of respondents

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Roles of respondents

role in which respondent is affiliated to sport

License required for the practice of the sport

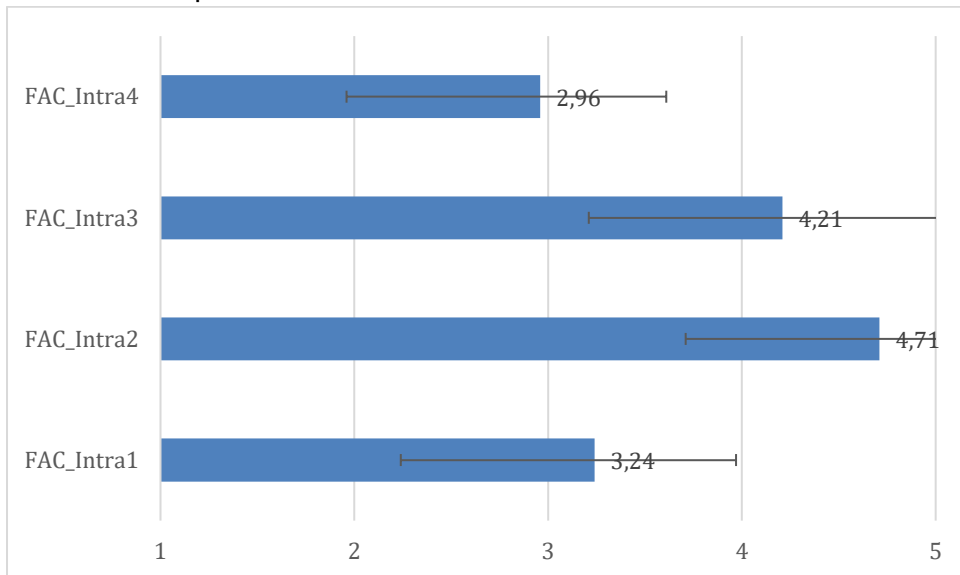License required — License not required

27%

73%

Years of experience

Years of experience

Means of Intrapersonal Facilitators

FAC_Intra4 — 2,96

FAC_Intra3 — 4,21

FAC_Intra2 — 4,71

FAC_Intra1 — 3,24

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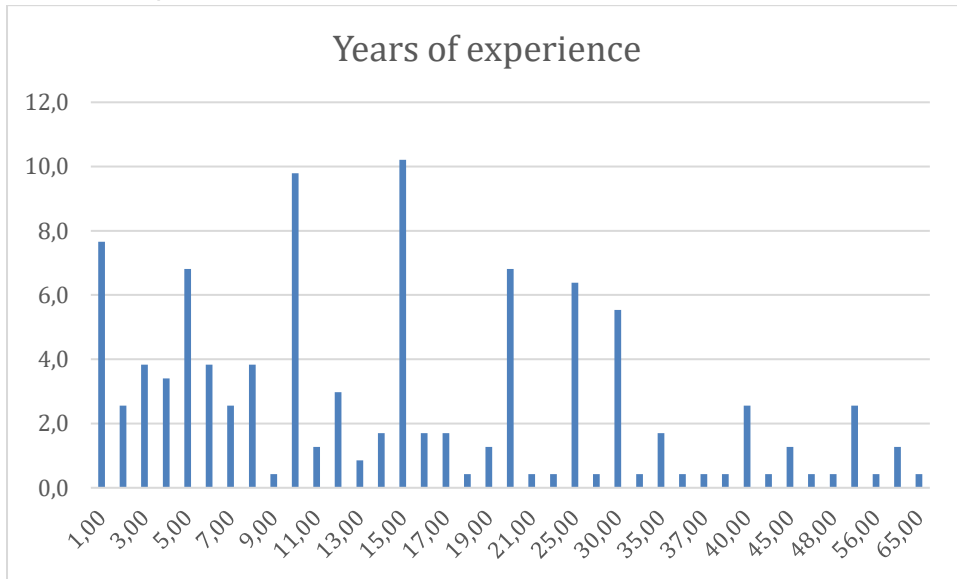
Mean values of Interpersonal facilitators

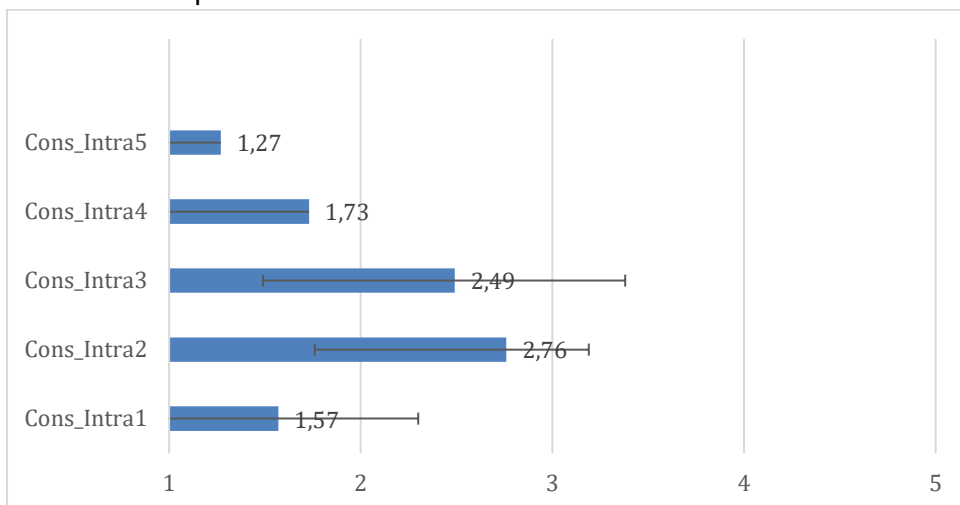FAC_Inter4 — 4,15
FAC_Inter3 — 4,63
FAC_Inter2 — 3,63
FAC_Inter1 — 3,88
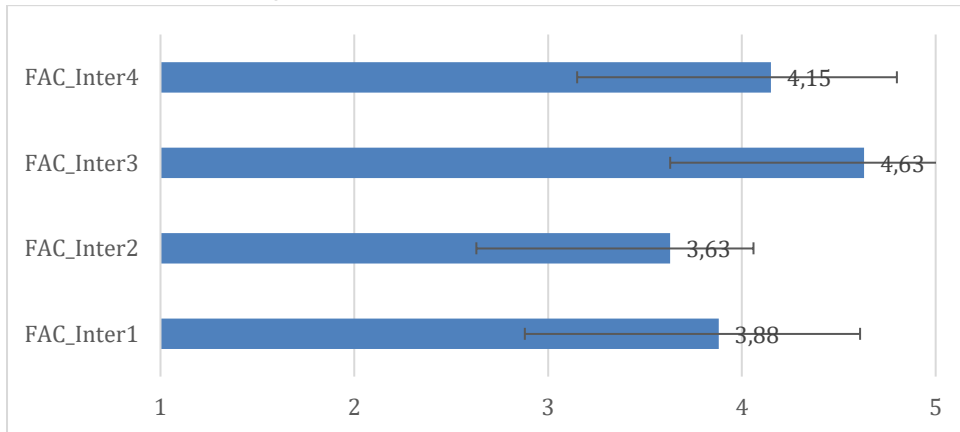
Mean values of structural facilitators

FAC_Struc6 — 4,68
FAC_Struc5 — 4,62
FAC_Struc4 — 3,78
FAC_Struc3 — 3,24
FAC_Struc2 — 4,17
FAC_Struc1 — 3,24

Means of Intrapersonal Constraints

Cons_Intra5 — 1,27
Cons_Intra4 — 1,73
Cons_Intra3 — 2,49
Cons_Intra2 — 2,76
Cons_Intra1 — 1,57
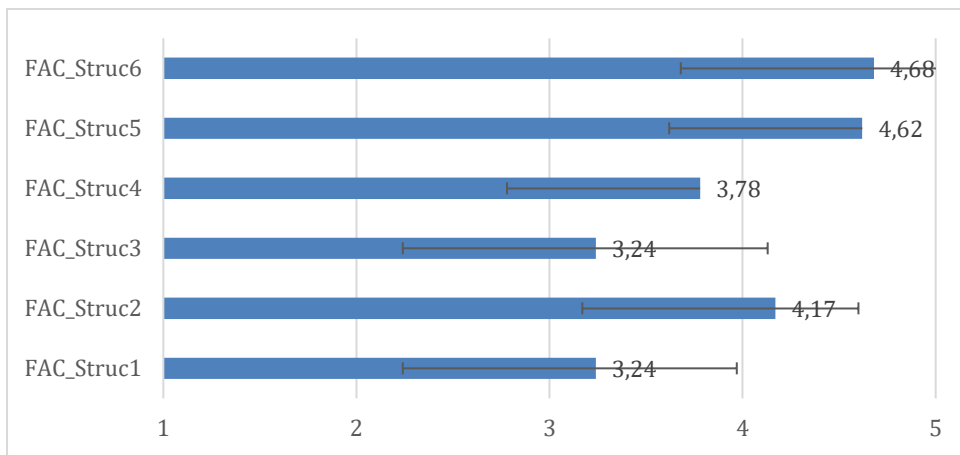
Means of interpersonal constraints

Cons_Inter4 — 2,49
Cons_Inter3 — 2,84
Cons_Inter2 — 3,02
Cons_Inter1 — 2,72

(scale: 1 2 3 4 5)
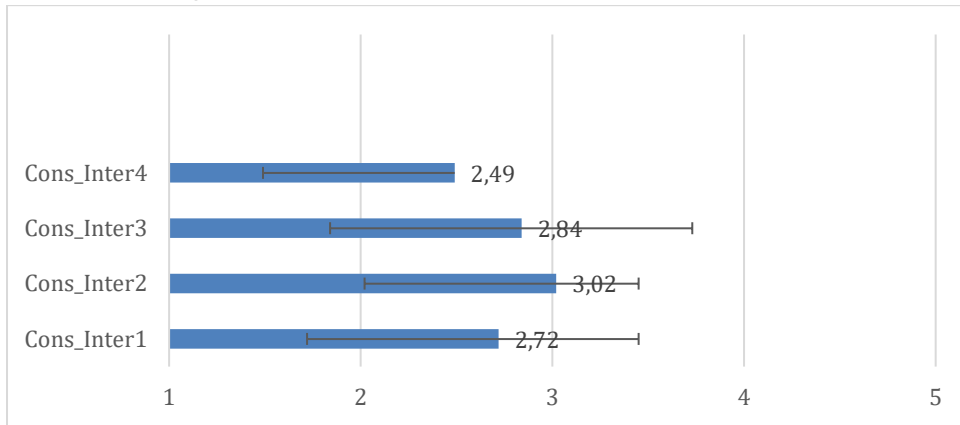
Means of Structural Constraints

Cons_Struc6 — 3,57
Cons_Struc5 — 3,83
Cons_Struc4 — 3,01
Cons_Struc3 — 3,41
Cons_Struc2 — 3,14
Cons_Struc1 — 3,25

(scale: 1 2 3 4 5)