EXPOSURE TO SPORTS AS A FACTOR ENCOURAGING 6-12 AGED GIRLS TO PURSUE PHYSICAL ACTIVITY

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Abstract: This paper aims to examine the hypothesis that exposure of girls aged 6-12 to a variety of sports activities in the hometown and community where they live will lead to an increase in the number of hours, namely the frequency of physical activity in which they engage in an average week after school hours. The research instrument is a questionnaire designed to test several different hypotheses that may affect the frequency of physical activity. The questionnaire has been designed and statistically validated when the exposure variable has been defined following in-depth interviews and qualitative research conducted within the overall framework of doctoral study research. The direct exposure component has been measured using five items in a comprehensive questionnaire that tests other variables. The exposure variable has been first statistically validated by a small statistical sample and running Cronbach's alpha, and then an EFA test has also been performed together with other variables. The target audience is 208 parents of girls aged 6-12 living in Israel. The daughters are involved in all types of sports activities at different levels, from girls who do not pursue physical activity at all to girls who engage in sports on a competitive basis.

Keywords: physical activity, frequency of physical activity, behavioral change, Athena project in Israel, marketing strategies factors, exposure.

1. INTRODUCTION

The importance of gender inequality

Gender inequality is accompanied by gender stereotypes that limit both women and men (e.g., Barnett and Rivers, 2011; Bem and Lewis, 1975; Kimmel, 2016). Higher levels of gender equality in the country allow a more significant prediction of male athletes and female athletes as winners of Olympic medals.

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Greater gender equality and greater opportunities for women have been found to increase corporate profitability (Desvaux et al., 2010) – improve team intelligence (Woolley et al., 2010), the scientific impact of intellectual collaborations (Joshi et al., 2015), as well as the economic growth of entire countries (Inglehart, Norris and Ronald, 2003). This is usually attributed to profits generated by previously unused women's human capital (Inglehart, Norris and Ronald, 2003; McKinsey Company, 2010), and the changes in the group dynamics involved in gender diversity (Joshi et al., 2016; Woolley et al., 2010).

Thus, increased gender equality in society brings to light the human potential not only of women but also of men. These findings contradict the popular belief that access to opportunities is a 'zero-sum game' where women's success inevitably results in men's loss. Instead, gender equality is a “win-win” situation that allows both genders to exhaust their true potential.

The full potential of women also increases men's achievements

Studies conducted after the London 2012 Olympic Games show that a company that is worth more in a large number of areas such as society and education, can demonstrate better achievements in its number of medals (both men and women). In other words, a WIN-WIN situation is created here, because the full potential of women also increases men's achievements and, thus, more achievements at the state / society level.

Analysis of the London 2012 Olympic Games data shows that only 11% of coaches and instructors in these games were women. (Slater et al., 2015).

According to Winand et al. (2010), the main reason for the quota set by the International Olympic Committee in the key sport positions in line with one of the approaches, is that there is a minority of women in the top positions in the field of sport. For women to be in key roles, a broader pool of women who want to fulfill such roles is needed. There needs to be an essential change – from the initial stages onwards – in the recruitment, training, internship, and wages phases. For various and familial reasons, many women do not try finding senior sport positions. Studies show that women only apply for jobs that meet 100% of their criteria. Men, on the other hand, apply even if they think they meet only 60% of the requirements, thus perpetuating the problem. Without a regular "supply" of women looking to get elected, 20% of such an important role seems like a very difficult goal to accomplish (Winand et al., 2010).
2. **Literature Review**

2.1 **Background of the sport situation in Israel**

Promoting the health, well-being and safety of teenagers is an important and complex challenge that society is facing, due to the adolescents’ vulnerability and exposure to risks and morbidity. The Israeli Ministry of Education, Sport and Culture (2007) examined the amount of physical activity of Israeli children and adolescents, attributing importance to this issue.

Regular exercising has prominent benefits for the promotion of the adolescents’ health. These activities strengthen the body and improve physical health, e.g., reducing body fat, improving metabolic processes, and bone density. Furthermore, physical activity enhances mental health, such as: decreasing depression and anxiety symptoms, as well as increasing self-esteem (Hallal et al., 2006).

Involvement in risk assessments performed in Canada, indicated that this can prevent premature mortality by about 20%. Thus, it is of utmost importance to establish habits in routine physical activity as early as possible (Katzmarzyk et al., 2000). Exercise habits that have been prescribed since childhood, may also lead to ongoing physical activity even in adulthood. In this context, parents have a highly essential effect on their children (Hallal et al., 2006).

2.2 **The relationship between academic attainments and gender among youths and adolescents**

Studies have linked physical activity to academic attainments, as well as a link between gender and achievements. Galily et al. (2012) found that engaging in high-achieving sport activities works differently on boys' education than on girls. While girls engaged in high-achieving sport activities demonstrated the highest academic attainments, boys engaged in the same activities demonstrated the lowest attainments. This may be due to the socio-cultural context of youth in Israel, and the legitimacy given to boys versus girls to engage in high-achieving sport activities (Galily, 2010).

2.3 **Gender differences in sports in Israel**

The fact that more men engage in high-achieving sport activities, compared to girls and women (Siegleschiffer, 2012), raised an interest in the field of research, aiming to identify the reasons thereof. Chachashvili-Bollutin (2010) and Lissitsa and Galily (2010) presented several categories of personal motives for physical activity such as Task motives, such as pleasure, skill enhancement, and excellence; self-image
motives, e.g., comparison to others; social motives, such as affiliation and integration. Women attribute great importance to physical activity (Netz and Raviv, 2003), mainly due to factors like stress reduction, physical fitness, weight loss and outdoor appearance. (Haas and Hwang, 2007). On the other hand, men attribute greater importance to the motive of competitiveness (key explanations for gender differences in physical activity are rooted in the different societal processes in which a considerable proportion of girls and boys undergo during lives. Girls engage in less physical and more aesthetic sports, while boys expect to participate in sports that require strength and physical touch).

Competitive sports increase gender differences in favor of men (Chachashvili-Bollutin, 2010). Gender differences are intensified when one looks at media coverage, absence of women from the news and articles, as well as no women acting as management members of sports associations (Lissice and Galily, 2010). All these factors reinforce social perceptions that define sport as a male issue (Shoval et al., 2021), (Siegleschiffer, 2012).

2.4 The relationship between gender and media in Israel

The relationship between gender and media is one of the most discussed topics in the crucial discourse about the media. In this context, the analysis of media content, both in terms of representation and in terms of meaning, is a key measure of gender balance. Representation is measured by the frequency of appearance in the various media contents; characteristics and roles attributed to men and women; and images and stereotypes in the context of gender. The importance is measured by examining the encounter between media messages and the audience that interprets them. Gender and television election campaigns in Israel have consistently demonstrated gender inequality. For example, an analysis of the 1988 election campaign found that less than 15% of television images were women; the women presented were younger than the men; they were not identified as professionals; and they were more emotional. The women appeared mostly as assistants to the election campaign – attractive young women dressed in fashionable clothes who presented and summed up the broadcasts or linked excerpts from it literally. They did not express individual political views. The female politicians who appeared in the media, addressed only "feminine" issues, such as education, health, welfare, and family. A study of the 1996 campaign did not indicate a significant change: women remained marginalized in the campaign, even though the status of women in society improved. Similar findings – and even worse as far as gender balance was concerned – were illustrated in the 1999 campaign. Thus, although there has been a change in the status of women in Israel during the last decade, including in the political arena, there has
been no change in their marginal representation in televised elections. The reason was probably related to the perception of politics as masculine in at least two aspects: the creators of the campaign seemed to believe that men set the tone in the political context and were, therefore, the more valued target. The second aspect was that the focus on men as the primary election audience, reflected the perception that only men were interested in politics. The conclusion is that there is a two-way connection between the media presentation and political reality, and that a change in women's election-related status requires not only a change in their social status. Rather, they must first and foremost be a change in politics itself and in life by the way it is perceived. In fact, a causal vicious circle has been created, in which election broadcasts reflect an existing conception of politics as a male kingdom and, at the same time, men themselves perpetuate this conception. The masculine orientation of politics through broadcasts, emphasizes politics as discriminatory against women. Broadcasts state that issues considered as masculine, are given the highest priority in elections, as it is believed that men understand these issues better. Still, the gender representation gaps in election campaign broadcasts are larger than such gaps in television commercials. The political arena in Israel is probably a source of greater-than-usual discrimination. As much as this area is so influential, such discrimination is dangerous and disturbing.

2.5 The Israeli field of sport

During the first four decades after the foundation of the State of Israel, there was just a relatively small direct involvement of governing institutions of the State in the field of sports. This was mainly due to the fact that the young state faced considerable challenges in the fields of foreign affairs, security, economy and absorption of new immigrants, and did not allocate time to the consideration of a 'marginal' issue such as sports. Furthermore, it is now customary to classify sports in Israel as part of what is known as the 'third sector'. This term is an inclusive concept for the group of voluntary and non-profit organizations in society. It is called 'Third', after the other two major sectors – the business sector and the government-public sector.

The scope of physical activity in Israel has doubled since the beginning of the 1990s, until the end of the first decade of the 21st century (Galily et al., 2011), simultaneously with the demographic changes that the Israeli society has undergone. In a short time, the percentage of people reporting that they are physically active, has increased from 24 percent to almost 60 percent of the population.

Nevertheless, although women make up more than half of the population in Israel, their involvement in sports is seen as an exception. Even at the beginning of the
modern sports era, their proportion among those engaged in physical activity at the professional and amateur level was negligible (Tamir and Galily, 2010). Even after women have penetrated diverse social circles, sport remained a distinct male territory. It was only following female struggles in the legal, parliamentary, and sports fields that a different trend became evident, manifested by a slight increase in the number of female athletes participating in competitive sports and the legitimacy thereof.

Moreover, the growth curve of the physical activity scope has stabilized in recent years. Galily et al. (2011) estimate that we are now at the point of balance between the barriers and the motivation for physical activity. It seems that some of the reasons for the increase in the rate of physical activity, such as the massive immigration from the Soviet Union in the 1990s, have exhausted themselves (Galily et al., 2011).

Historically, women’s sports activities have been at a disadvantage in terms of their number, status, and social standing both in Israel and around the globe. The number of girls and female adolescents that have turned to sports, the number of competitive athletes, the budgetary allocations to women’s sports over the years are factors need to be improved, if gender equality is to be achieved. Engaging in sports is a social, ethical, and educational instrument, which impacts all circles, beginning with the individual, through to the community and, finally, to society at large, making them all more egalitarian and more just, as women become equal partners in the sporting arena.

2.6 ATHENA – The national Israeli project

The changed situation in Israel with reference to sports activities, has resulted in the establishment of the Athena project, aiming to bring about a further increase in the number of women engaged in competitive sports. Athena – the national Israeli Project for the Advancement of Women in Sports – is supervised by the Israeli Ministry of Culture and Sport under a multi-year plan.

The Public Council for the Advancement of Girls, Adolescents, and Women in Sports has been functioning since 2005, pursuant to the Israeli Government Decision 3416. The Council serves as an advisory body to the government, the Ministry of Culture and Sport, and the minister in charge, as to the promotion and development of women’s sports in Israel.

Athena offers opportunities in sports for girls, adolescents, and women through targeted programs in a variety of sport activities, sports organizations, projects at sports clubs, programs involving local authorities, and programs promoting female leadership in sports. Its activities involve girls and women of all
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Athena works to identify, retain, promote, and support girls and women in all branches of sports, from girls in primary school and up to female athletes about to be included in Israel’s Olympic delegation. “To Bring about Social and Gender Change in Israeli Sporting Culture, Ensuring Full and Equal Participation for Girls, Adolescents and Women in all Sports and at all Levels” (Ministry of Education, Sport and Culture, 2007).

Despite the Athena project in Israel during the last decade, the marketing activity, and the awareness and sympathy for the Athena brand, there was no considerable change in the number of Israeli girls and female adolescents who engaged in sports. Their percentage has never exceeded the 22% line, although there has been an increase in the total number of female athletes and male athletes in Israel as well. Hence, the total number of female athletes has not essentially grown (25,311), constituting 21.2% of the total female athletes and male athletes in Israel. The unexplained gap between the number of competitive female athletes at young age and that of female athletes reaching an Olympic level, is unclear. Thus, the level of government policy has been promoted, trying to find out how to work for a more equitable society also in the field of sports.

3. METHODOLOGY

3.1 Research aim

This study aims to identify the motivational factors that affect the frequency of physical activity of girls aged 6-12, and the research question is: “Can exposure help in increasing the physical frequency of sports activity among girls aged 6-12?”

3.2 Research method

A questionnaire was, based on the answers of the respondents from the qualitative stage. Each of the categories comprised several items that measured it. A Cronbach's alpha was calculated for each variable, and the answers to all the questions were on a Likert scale of 1-5: 1 represents – do not agree at all, and 5 represents – agree in a very great extent. If the parent didn’t know, he/she could skip the question or mark “I don't know”

The items that measured the independent variable exposure were:
1. In my town there are lectures on physical activity for the girls.
2. Around my city/village/kibbutz there are varied sports events (races, tournaments, etc.).
3. My community holds sports competitions for girls
4. The local/district council praises the achievements of the children's sports activities before an audience.
5. The local/district council advertises the girls’ sports activities in the various media channels.

This independent variable was called Ex and the Cronbach's alpha that was calculated is 0.749.

During the summer months of 2022, the questionnaire was administered online to parents of girls aged 6-12 throughout Israel. The threshold condition for the questionnaire was at least one girl aged 6-12 and living in Israel.

The dependent variable was the frequency of physical activity of girls aged 6-12 during an average week after school hours (HR_Bat).

### 3.3 Research hypothesis

There will be a relationship between the motivational factors EX – Promoting physical activity as a local and social culture and highlighting local sports heroes and the frequency of physical activity in girls aged 6-12.

### 3.4 Research Sample

The threshold condition for the questionnaire was at least one girl between the ages of 6-12 and living in Israel.

Two-hundred and eight parents responded to the questionnaire: 36.7% (76) were fathers and 63.3% (131) were mothers. Almost all the respondents were Jewish – 198 respondents, 96.6%. One-hundred eighty-seven respondents (90.3%) were secular (i.e., not having any connection with religion), and 15 (7.2%) respondents were observants (minimum connection with religion).

Almost 85% have two or three children in the family, and the average number of children in the family was 2.52 children. The average place according to birth order in the family of the girl that the parent chose to answer, was 1.91. The average age of the parents was 44.18, the average total years of schooling was 15.83, with 36.9% having a bachelor's degree (76).

In response to the average wages, 17% (34) respondents earned average wages, 45.5 (91) respondents earned above average monthly wages, and 21 (42%) respondents reported monthly wages well above the average.

Regarding the answer to the question about the dependent variable, namely how much time the girl is engaged in physical activity on average during a normal week after school hours: 40 respondents (19.5%) indicated two hours and additional 40
respondents (19.5%) indicated three hours. Twenty-eight respondents (13.7%) indicated 0 (zero), representing lack of the girls’ engagement in physical activity. Thirty-two respondents (15.6%) indicated one hour, and 28 respondents (13.7%) indicated four hours. Eight respondents (3.9%) indicated five hours and 29 respondents (14.1%) indicated six hours or more as the number of hours that the girl was engaged in physical activity on average, during a normal week after school hours.

4. FINDINGS

A positive significant relationship was found between the motivational factor, promoting physical activity as a local and social culture, and highlighting local sports heroes (EX), and the frequency of physical activity among girls aged 6-12 (HR_Bat), as illustrated by the model.

A positive significant relationship was found between Ex and HR_Bat (b=0.239, p=0.036), corroborating the hypothesis (f(1,202)=4.45, p=0.036)). This implies that the higher the Ex, the higher the HR_bat. Ex accounts for 2.2 of HR_Bat variance (R²=0.022)

Model Summary

<table>
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<th>R</th>
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<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<td>.022</td>
<td>.017</td>
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a. Predictors: (Constant), EX_T

ANOVA

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<td>1</td>
<td>15.453</td>
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<td>202</td>
<td>3.476</td>
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<td>203</td>
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a. Dependent Variable: HR_PG_BAT
b. Predictors: (Constant), EX_T

Coefficients

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<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
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<td>(Constant)</td>
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<tr>
<td></td>
<td>EX_T</td>
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<td>.113</td>
<td>.147</td>
</tr>
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a. Dependent Variable: HR_PG_BAT
5. Discussion and Conclusions

Galili and Tamir (2011) argue that the curve of the increase in the number of competitive athletes has been slowing down, and that we have reached a ‘glass ceiling’ at the moment, in terms of the increase in the number of athletes in the country. Sports is considered as masculine, among other things, for historical reasons in the State of Israel. One of the options for increasing the number of athletes in Israel was to increase the number of women in the field. The Athena project was designed in order to help increasing the quantity and quality of female athletes. It involved the investment in the brand, sympathy for the project, and increased rate of women joining many fields other than sports over the years of the project's activity. In spite of all these, the glass ceiling has not been broken and the number of competitive female athletes has not crossed the 22% threshold.

This study constitutes part of a larger study that examines what might eliminate the barriers of girls and boys regarding engagement in physical activity and sports. This study aims to examine the aspect of exposure to sports through a valid and statistically tested questionnaire.

The conclusions drawn from the findings illustrate that the world of male sports which has been rooted over the years in the State of Israel. Moreover, the fact that there is no exposure on the sports channels to women’s sports in Israel implies that this lack of exposure has been going on for many years, despite the impressive achievements of Israeli female athletes in the various Olympic Games. At the base of the pyramid there are not enough girls who engage in sports for more than five or six hours, although it is known that practicing and persisting in sports in the afternoons may lead to competitive sports in the future. It can be seen that at the base of the pyramid there are not enough girls who engaged in physical activity for more than five or six hours per week, when it is known that practicing and persisting in sports during the afternoons may lead to competitive sports in the future.

It can be concluded that if a local city wants to increase the base of the pyramid of girls who will be involved in sports, they need to motivate the girls by increasing the sports events in the city and especially to increase the exposure to it, in the various media throughout the city, whether it is local races, or other sports activities that the municipality initiates, Including lectures on sports by female athletes, as it has been found to contribute to the girl's motivation to be more hours engaged in physical activities.

It can be assumed that if the state or the city wants to increase the base of the pyramid of girls who are involved in sports, all that needs to be done is to promote the sports events and, especially, the exposure to them in the various media throughout the city.
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REFERENCES