GENDER DIFFERENCES OF COMPETITIVE ATTITUDE FROM CHILDHOOD TO ADULTHOOD

Botond Kálmán¹*, Arnold Tóth², Tímea Juhász³

¹Eötvös Loránd University, 1-3 Egyetem tér, Budapest 1055, Hungary

²Budapest Business School, 10-12 Buzogány utca, Budapest 1149, Hungary

³Budapest Business School, 22-24 Diósy Lajos utca, Budapest 1165, Hungary

Abstract

The authors have analyzed the gender differences along competition. The analysis is based on a survey executed in 2020 and was filled out by 403 respondents, out of whom 285 were women, 118 were men. Notwithstanding it was not a genuine longitudinal data collection, respondents have been asked to answer questions about their personality and competition-related attitude regarding not only their present circumstances but also their childhood and adolescence. The primary objective of the study is to demonstrate the difference between females and males in their personality and competitive attitude, and, in addition, justify that both genders have a different motivation for competition with distinctive competition habits at the workplace.

The authors have used factor analysis and average-based aggregation for constructing dimensions, mean comparisons to examine simple differences, correlation for analyzing relationships, general linear models for recognizing the influence of gender on the relationship of the dimensions. An inverse analysis of classification tree has been executed to reveal how women and men differ in their personality and competitive attitude. Finally, two Structural Equation Models – one for each gender – have been established to analyze how complexity of personality and competitive attitudes determine current competitive habits for females and males and display the disparity of the underlying effects.

Beyond the usual tendencies, i.e., males are more competitive, we have found women to be more maximalist and motivated by failures, while men have been found to have positive personality and extroversion. As regards team-competition, males focus on team spirit instead of competition. Age has a greater effect on females, viz., several aspects of competition become less pronounced with age.

Keywords: competition, gender, childhood, adulthood, personality, motivation

1. INTRODUCTION

In Europe and the US competition has a sensible function in educational, social, sport, and economic terrains. Notwithstanding this seemliness, the manner we rival with each other and the notion of competition is equivocal.

Various litterateurs have delineated two major categories of competitive instigations or aspects [1]:

- 1. The yearning to gain a higher achievement than other people.
- 2. The hankering to ameliorate our individual accomplishment.

Disquisition on competitiveness at the layer of the individual has highlighted gender as a psychological factor, riveting on the margin in relish for competitive ambient between males and females [2]. A regular supposition is that males and females are congenitally distinctive [3]. For instance, men are more receptive to rivalrous situations than women [4]. Mark van Vugt [5] asserts in his so-called male warrior hypothesis that discordance and competing between groups formulated human psychology. Doctors elucidate this circumstance as an endocrinologic procedure [6]. Gender differences in convictions, risk behavior, miscellaneous related traits are delineated by various litterateurs, for example Niederle and Vesterlund [7], who investigated competitive scenes in education, workplace, and sport, too. They failed to detect grand did not find large gender disparity in sports contests.

However, research verifies that a relatively strong link exists between youth physical activities and sports pursued as an adult [8]. As regards education, women might underachieve on intake exams to particular programs because they incline to recite elevated degree of exam anxiety [9]. So long as females outman males on college estates in most Western countries, puissant gender disparity perseveres in this area of research. Science subjects, viz., technology, engineering, and mathematics, interest a moderate number of females, while human sciences are substantially womanly [10]. In correspondence with Steegh et al. [11], gendered peculiarities in technology and arithmetic turn up in springtime, gradually elaborate, and eventually convey progressive program choosing in high school. They imply that sexual generalization, thru their repercussion on self-perception and self-concern, contribute significantly to the operations redounding to women partaking poorly in competitive situations. Price [12] also attests gender dissimilitude in accomplishment under competitive tension. An accretion in competitive stress in the workplace results in the proliferation of the gender margin, with the results of males increasing vis-à-vis that of females. Research lab tests have proven that males are significantly more inclined to engage in a contest than females in conceptionally male duties [7]. Also, the practical statistical piece of data, viz., an achingly limited number of females get to the most altitudinous crosspieces on the power structure, accords with the experimental results. Presently in Europe, solely approximately every tenth executive is female [13]. This disparateness in gender is attributed to gender-alternative convictions on comparative accomplishment and partiality for rivalling and is considered to have a recondite effect on the workforce, particularly in the trade for the most sought-after workplaces, which inadequately represent females. This dissimilitude prevails also in view of women's achievements in education and larger administrative warranties against gender-based discrimination [14]. Significantly, this is expensive not solely for females who might not proceed in remunerative areas dominated by men, but for community as well, since the most adequate applicant might not be encountered with the cognate position. Rivalling frequently brings about a social class hierarchy amid the opponents. For instance, contention for reputable workplaces or advancements subsumes a competition for assets, where certain people flourish while others not; yet it also infers miscellaneous candidates being categorized relative to others, with the prosperous candidate notching up higher social rank than the counterparts who did not gain the position or the advancement. This hierarchy is societal since the triumphant candidate is recognized and the manager is aware of those who did not make it [15]. Difference between genders is not only discernible in interpersonal competitive situations. So long as competitive ambients are generally related to stances where more people hound objectives that are not concurrently attainable, it can also occur that people contend against themselves. Engaging in a contest against own achievements of previous times may be a constitutive segment of our character, embracing workplace and physical activities. Utilizing details derived from an "in vivo" test, Bönte, Procher and Urbig [16] discover practical observation that females are, typically, more loath than males to contend against their own accomplishment of earlier times. Their findings propose that this distinction can be primarily clarified by sex discrepancies in risk predilections. Florya et al. [2] display testimony that female predilections over rivalry alter with age in a way that gender disparities, while significant for adolescents, vanish in aging adults owing to the fact that senior ladies are more inclined to compete. Their conclusion that relish for competing comes off as just as stout amid senior ladies as it is amid males proposes a plain gender-sensitive verdict of competitiveness, which is fallacious, to wit, age appears just as crucial as gender. This not only holds true about workplace competition but also vis-à-vis educational area [17]. A wide range of corroboration unveils that juveniles that are elderly in their group at school are disposed to achieve better grades than their youngest counterparts [18]. The available data indicate that this influence can have a durable upshot, affecting the selection of occupational activities and job market results [19] [20]. These repercussions are nevertheless inconsistent with announced impacts being occasionally rather diminutive or trivial on employment market consequences [19], whereas considerable in fields as politics or physical activities [20]. Being comparatively old in educational in educational institutions can assist in forming self-assurance or a predilection for contests, which provides advantages in fields marked by intense competition.

Discrepancies in age and gender have been widely known for grown-ups yet were solely lately investigated completely and minutely for infancy and puberty. Scientific literature mostly scrutinizes

the role of personality regarding these age-groups. Function of character is momentous in the shaping of competition-related attitudes. The effectiveness of the Five Factor Model (FFM) to delineate character disparities in infancy and puberty is deeply held. Furthermore, there is a sound accord that personal characteristics in infancy/puberty are connected to a wide variety of short- and long-standing aftermath, emphasizing their usefulness in disquisition and appraisement [21]. The examination of personality has also proven that gender dissimilarities commence to turn up in puberty and, as individuals get older, gender discrepancies discovered at an earlier age have a propensity to evolve - in terms of both tendency and vastitude – at the age of maturity, with women tallying more prosperously than men regarding most peculiarities. Of course, personality alternates as time passes. Psychological state is especially essential in adolescents and young grown-ups. Delight and, in addition, the related sensation of recurrent positive emotions, contribute to well-being through its influences on social interactions, healthy way of life, pressure and immune system. Individuals with a high level of relative health are more probable to get a degree at university [22]. The role of social preferences, out of which popularity has a leading position in childhood, is crucial in the solidification of personality. Why do minors and teenagers praise fame so much? Ultimately, fame is not effortlessly accessible and being famous may be considered as a mixed blessing as it is relatable to various detrimental consequences, for example decreased health awareness and possibly worse grades at school [23]. Even so, well-known infants acquire a diverse range of gains. Quite famous infants have more accessibility to a cohort's precious informational, material, and social assets [24]. Overlooking both the up-to-date and out-ofdate literature, the authors have not found a complex inspection that analyzes the liaison between childhood personality traits and competitions such that it scrutinizes its persistence and changes in subsequent stages of life. This linkage and modification have been investigated by the authors. The research focused on three areas: childhood and adolescent academic and sport contests and their impact on competitive attitude in adulthood. Having overlooked the relevant scientific literature the authors considered the following hypotheses:

- H1: such dominant personality trait is detectable which is definitive as regards competition
- H2: childhood competition motivational factors hold up in adulthood but at different rates depending on the gender
- H3: personality of men and women affects disposition to competition and participation in competition in a different way

2. MATERIALS AND METHODS

The study is based on a questionnaire of 403 respondents (285 females and 118 males) carried out in 2020. The questionnaire consisted of socio-demographic variables, like gender, age, occupation, etc. and professional questions about competitiveness. The second part of competitiveness questions were focusing on three age periods of the respondent: childhood, adolescence, and the present. These questions belong to groups, hence it is possible to create summary scales of them. The main goal of the analysis was the find out what is the difference between women and men in the aspect of competitive attitude. To find the answer a structural equation model (SEM) has been set up for women (Fig. 1) and another one for men (Fig. 2), based on the scales. The models have been put together based on the sections of the questionnaire.

The SEM models consist of six main parts:

- Personality of childhood,
- Personality of adolescence,
- Competitive attitude of childhood,
- Competitive attitude of adolescence,
- Competitive personality of the present,

• Competitive attitude of the present.

Personality scales consist of six parts: positive personality, competitiveness, individual player, team player, extroverted, failure management; the scales were prepared previously by factor analysis. All the other scales are represented by their components' means.

In accordance with the regression statistics of the two models (Fig. 3), we can state that the model of women is a decent one, while the model of men can also be accepted, nonetheless its regression statistics are not so nice vis-à-vis the previous one. It is advisable keep in mind, that the female model is based on 285 observations, while the male model is less than half as big as the other one. Due to the small sample size the male model's regression statistics are very close to the threshold of a very good model – see Table 1.

Model	Ν	NFI	RFI	IFI	TLI	CFI	RMSEA	LO 90	HI 90
Females	285	0.872	0.838	0.941	0.924	0.940	0.051	0.043	0.059
Males	118	0.755	0.703	0.892	0.864	0.888	0.071	0.058	0.084

 Table 1. Model regression statistics

Source: authors' own

3. RESULTS

3.1. Relationships among personalities Childhood and Adolescence (1a-1f, 2a-2f)

We have found in both models that personality traits in adolescence are mostly determined by the corresponding personality traits of childhood. That explained variance is between 23.8% and 53.5% (see Table 2), we have found notable difference between the two genders in only two cases: individual player is explained at a higher level in case of males and extroversion in case of females. Beyond explained variance the determinants of the personality traits differ. Team player personality has a positive effect on positive personality for males (0.189), but for females this trait will reduce competitiveness (-0.103). Men's frequency of competition in childhood negatively affects (-0.132) the individual player attitude in adolescence.

Team player personality of women negatively affects their competitiveness (-0.103), but as regards men, it positively affects their positive personality (0.189). This personality dimension of childhood affects different personalities in case of females and males.

The drivers of competitiveness in adolescence differ between the two genders. In case of women, only slight indirect effect has been found, the three direct ones determine the dimension mostly. But for the males the direct effects of "Love of competition" has a remarkable indirect effect on competitiveness. Namely: competitiveness (0.141), individual player (0.119), failure management (0.101), impact of competition (0.111) in childhood. All these dimensions make the adolescent males be familiar with competition in childhood and, in turn, become competitive in adolescence, while in case of women, nearly just the three direct effects have been experienced.

In case of males, addition to the childhood personality, frequency of competition in childhood weaken (-0.132) the individual player personality in adolescence.

Extroversion in adolescence has indirect determinants only for the males: positive personality (0.077) and almost negligibly failure management (0.033).

- 3.2. Competitive attitude in childhood (11, 12, 13)
- *3.2.1. Impact of competition in childhood (13)*

Impact of competition in childhood is almost a standalone variable in case of females (1.9% explained variance), but not in case of males (18.8% explained variance); for females, the only determinant

(negative effect) is being an individual player in childhood (-0.137), but men experience positive impact in case of higher level of positive personality (0.399) and failure management (0.170).

3.2.2. Love of competition in childhood (12)

Results about affection for competition in childhood is very similar for the females and the males as well: similar magnitude of explained variance (0.341 and 0.447 in order), and three determinants out of four are the same. The only difference derives from that, in case of females, team player personality has a significant negative effect (-0.115) on fondness for competition, but, in case of males, failure management has a positive significant effect (0.232) on this competition attitude. Competitiveness (0.390 and 0.397), individual player personality (0.288 and 0.355) and impact of competition (0.393 and 0.314) have positive significant effect on love of competition for both genders. The positive indirect effect (0.125) of positive personality for the males is also worth being considered. The difference between the two genders are the following: team player personality can weaken women's affection for competition, but failure management and positive personality – through the impact of competition – will intensify passion towards competition.

3.2.3. Frequency of competition in childhood (12)

Devotedness to competition significantly affects frequency of competition for both genders (0.314 and 0.277), but females' team player personality (-0.108) and impact of competition (0.193) will have significant effect on frequency of competition, but, in case of males, besides the love of competition, only positive personality (0.263) will enhance the frequency of competition besides the previously mentioned one. Women's competitiveness (0.122) and (in addition to the direct effect) impact of competition (0.123) – through love of competition — will indirectly increase the frequency of competition. Similarly, passion of men for competition mediates the effect of other variables on frequency of competition: individual player (0.093), failure management (0.079) and impact of competition (0.087). To sum, not surprisingly, fondness for competition is the most important determinant of frequency of competition for both genders, but there are some differences in the background. Especially: team (females: negatively) versus individual player (males: positively) personality, and failure management, as a booster of love of competition, will make men's competition more frequent.

3.3. Competitive attitude in adolescence (14, 15, 16)

3.3.1. Impact of competition in adolescence (16)

Impact of competition in adolescence is determined by the positive personality (0.143 and 0.181) of the same age and the impact during childhood (0.666 and 0.683) for both genders. Beyond these two determinants, women's extroversion in childhood will have a slight positive effect (0.084) on the impact of competition. As regards men, competitiveness (0.104), individual (0.120) and team player (0.171) personality of the adolescents will result in higher level of the impact of competition. In the case of women, being individual players in childhood (through childhood's impact of competition) has negative (-0.097) and positive personality (through childhood's positive personality) has slight positive (0.065) indirect effect on the impact of competition. Contrary to women's slight indirect effects, because of the direct effect of the adolescent personality dimensions, the ones of childhood have impressive indirect effect through the corresponding childhood personality: positive personality (0.356), competitiveness (0.065), individual (0.095) and team player (0.118), failure management (through childhood impact of competition: 0.132).

The main difference between females and males can be found in the list of personality dimension determinants. For men, apart from positive personality three more personality dimensions modify the impact of competition: competitiveness, individual and team player personality and failure management - to sum, it has more widespread determinants compared to females.

3.3.2. Love of competition in adolescence (12)

Although the magnitude of explained variance of love of competition is similar for both genders, the set of determinants is wider in case of women. The earlier (viz. childhood) love of competition (0.654

and 0.719) and the adolescence impact of competition (0.222 and 0.248) have positive effect for both genders. The difference between females and males arise from the personality determinants: in case of females, extraversion (-0.082) and failure management (-0.121) of childhood affect negatively, while competitiveness (0.139) and failure management (0.171) of adolescence affect positively the love of competition. In case of men, the only personality determinant of love of competition is the individual player personality of adolescence (0.092). Although there are more direct effects of this dimension for women, men have stronger indirect effects determining the affection for competition. Considering women, competitiveness (0.354), individual (0.135) and team (0.092) player, failure management (0.108) and impact of competition (0.421) of childhood, have indirect effect on love of competitiveness (0.300), individual (0.328) player, failure management (0.237), and impact of competition (0.407) of childhood. It seems that childhood has greater effect for the love of competition in adolescent age in case of males than in case of females.

3.3.3. Love of competition in adolescence (12)

Compared to females, love of competition (0.140) and team player personality (-0.125) have no significant effect on frequency of competition in case of men, but positive personality (0.139) will enhance the frequency of competition in adolescence. Personality and competition attitude dimensions of childhood have notable indirect effects on the frequency of competition in adolescence: in case of women, these are competitiveness (0.130), being a team player (0.176), love (0.301) and impact (0.267) of competition, predominantly through the love of competition in adolescence. For the males the most important indirect effects derive from positive personality of childhood (0.299) through the adolescence version, and love (0.219) and impact (0.102) of competition through the childhood frequency of competition.

The most conspicuous difference between females and males is that the second most important (after the childhood version) driver of this attitude is passion for competition in case of women (additionally, effect of team player personality is also significant, but most of the indirect effects are expressed through love of competition), but positive personality is the most essential incentive in case of men. And the adolescent variant of this dimension forwards the effect of childhood one.

3.4. Competitive personality of the present (18, 21, 26, 27)

3.4.1. Dimensions of maximalism (18)

Maximalism will be determined by positive personality in case of both genders (0.128 and 0.373), however, in case of men, only adolescent personality has significant effect, but in case of women, both childhood (0.307) and adolescence have it. Team player personality of adolescence (0.184) is only significant for men, extroversion (0.120) and failure management (0.224) of adolescence are so only for women. In case of women, love (0.180) and impact (0.121) of competition in adolescent age; for men, frequency of competition (0.231) in childhood will result in maximalism. The childhood failure management (0.140), impact (0.121), and love (0.211) of competition have the strongest indirect effect over their adolescent version in case of women. As regards men, the childhood variants of the direct effects (positive personality (0.242) and being a team player (0.160)) and impact of competition (0.108) – over love and frequency of competition – have notable indirect effect on maximalism. For women, different drivers (extroversion, failure management, impact and love of competition) of maximalism beyond the positive personality have been found, while maximalism of men have found to be mostly coming from team player personality, childhood impact and frequency of competition.

3.4.2. Motivators of Competition (21)

The question arises what motivates competition. Currently maximalist (0.148) females, who did not use to be individual players (-0.101) but cherished competition (0.181) and used to compete (0.144) in adolescent age, feel the positive effect of competition, and do not consider competition among colleagues within an organization harmful (0.121). The list of determinants in case of men is shorter: only competitiveness of adolescence (0.400) and love of competition in childhood (0.224) will motivate men for competition.

The final roots of motivation for competition is different for females and males. As it has been exposed, these scales have wider, but less sturdy determinants in case of females than males. The same tendency can be seen among the indirect effects: women's motivation is indirectly determined by positive personality (0.069), competitiveness (0.064), extroversion (0.075), failure management (0.140), predilection for (0.121) and impact of (0.211) competition in childhood. For males, the catalog of remarkable indirect effects consists of four elements: positive personality (0.242), being a team player (0.160), love (0.064) and impact (0.108) of competition in childhood. The most meaningful difference between the two genders is that females' motivation is coming from a broader set of aspects and not just from childhood/adolescence but from the present as well.

3.4.3. Impact on the individual (26)

Impact of competition on the individual in the present has few "foreign" determinants in case of females. Beyond childhood (0.253) and adolescent (0.350) impact of competition, childhood positive personality (0.148) and opinion about competition within an organization (0.181) will determine the present impact of competition. In case of men, there are several determinants of impact of competition: competitiveness (0.161) and individual player personality of childhood (0.182) positively, extroversion of childhood (-0.149) and failure management of adolescence (-0.145) negatively affect this impact; in addition, the impact in childhood (0.268) and adolescence (0.318) and the evaluation of competition at workplace (0.191) enhance the impact of competition on men in the present.

Childhood's impact of competition has the strongest indirect effect (0.261) on the impact of competition of women; nevertheless, it is advisable to be taken into consideration that this scale has direct effect (0.253) as well, so it is the most important determinant of the impact of competition on females. For men, beyond the impact of competition in childhood (0.251), positive personality of the same age (0.225) is the scale that has a solid indirect effect on this scale. The conspicuous difference between females and males is in the personality determination amid childhood. The impact of competition on females inherited by the impact in childhood and adolescence but contrary to men's list of five elements, only one aspect of personality (positive personality) has a significant – direct and/or indirect – effect on this scale.

3.4.4. How do you evaluate competition among colleagues within an organization? What impact does it have on an organization? (27)

If someone – either female of male – enjoys competition, they will consider competition among colleagues within an organization positively (women: 0.289, men: 0.311); moreover, in case of men, the motivation for competition will enhance the positive judgment about competition in the workplace (0.251). This in turn results in the remarkable difference in explained variance (0.138 vs. 0.279). Competitiveness (0.070) and positive impact of competition during childhood (0.074) and in the present (0.112), and incentives of competition (0.097) will indirectly incline females to positively evaluate competition among colleagues. For men, the indirect effects of competition (0.163) and positive impact (0.088) of competition in childhood, added to the motivators of competition (0.104) and positive impact of competition (0.083) in the present will all augment the evaluation of competition among colleagues within an organization in a positive sense. As it has been clarified, confirmation of positive impact mostly dominates amid the effects in case of females. so long as the attitude is as important for men as confirmation.

3.5. Competitive attitude of the present (19, 20, 25)

3.5.1. Do you usually compete with your co-workers at work (while working)? (19)

The determinants of competing with co-workers at work completely (count and items) differ for females and males. In case of women, childhood competitiveness (-0.139) and individual player attitude (-0.129), adolescent positive personality (-0.221) and extroversion (-0.137) negatively, but childhood love of competition (0.177), maximalism (0.211) and enjoying job competitions (0.335) positively affect the frequency of competition with co-workers. Adolescent failure management (0.205) and

negative impact of competition (-0.262) and positive evaluation of competition among colleagues within an organization (0.365) will encourage males for competing with co-workers at work.

For females, the negative direct effects of childhood personality dimensions are tainted or even balanced (competitiveness: -0.139+0.162=0.023) by their indirect effects. Beyond these effects, competitiveness (0.109), successful failure management (0.061) impact of competition (0.085) of adolescence; affection for (0.057) and impact (0.119) of competition in childhood, and positive impacts (0.126) and motivators (0.110) of competition in the present will indirectly make competition more frequent with your co-workers in the workplace. In case of men, several indirect determinants have been identified in their infancy, puberty and present.

For men, childhood's positive personality (-0.083) and impact of competition (-0.160) have a negative indirect effect on the evaluation of competition among colleagues because of the negative direct effect of the impact of competition during adolescence (-0.262). Successful failure management in childhood (0.104) and competitive motivation (0.130), added to enjoying job competition while working (0.123) will result in more frequent competition with co-workers.

The first main difference between females and males is in the directness of causes. For females, the effect of childhood and adolescence is mostly direct (and the direct effects were adjusted by their indirect effects), but for males, their effect is mostly indirect and negative because of the negative direct effect of the adolescent impact of competition. Secondly, for females, in contrast to males, maximalism is more important in the present than the set of motivators of competition for competing more frequently with co-workers.

3.5.2. Who do you compete with? (20)

The broadness of competition (20 - Who do you compete with?) has three determinants for men: love of competition at an adolescent age (0.233), competing with co-workers (0.476), and enjoying competition while working (0.282). For women, the list contains the items (0.207, 0.414 and 0.171 respectively) of the males, plus childhood and adolescent (0.207) love of competition (-0.152), motivators of competition (0.323).

There are several indirect effects on this scale (Appendix C) yet we shall focus only on the strongest ones. For females, competitiveness in childhood (0.095) and adolescence (0.141), preference for competition in childhood (0.308 – the total effect becomes positive due to the adolescent predilection for competition), frequency of competition in childhood (0.115) and in adolescence (0.168 – the total effect becomes almost zero due to the adolescent preference for competition), adolescent passion for competition (0.101 – through frequency of competition, motivators and maximalism, competition with co-workers), all the scales of competitive personality of the present (maximalism: 0.152, motivators: 0.109, impact: 0.232, evaluation: 0.094), enjoying workplace competitions (0.162) will result in a broader range of competition.

In case of men, we have not found as many indirect effects as in the case of women. Competitiveness (0.194), being an individual player (0.112), failure management (0.121) and preference for competition (0.253) during childhood, failure management (0.0.085) and competitiveness of adolescence (0.194), motivators of competition (0.150), and positively evaluating intercollegiate competition (0.190) will inspire men to compete with more people around them.

In case of women, adolescent predilection for competition is a key determinant both directly and indirectly (by changing the direction of the effects) in searching for an increasing number of competitors; furthermore, their competitive attitude will be affected by several aspects compared to males. Men compete with more people if they cherish it. For males, most determinants come down to subjective elements, but for females, miscellaneous effects are also significant.

3.5.3. Do you enjoy job competitions while working? (25)

Determinants of enjoying job competition while working is nearly the same for both genders. They enjoy job competition if they used to be competitive at an adolescent age (females: 0.294, males: 0.295), they are motivated for competition (females: 0.327, males: 0.297) and enjoy the positive impact of

competition (females: 0.268, males: 0.248). In addition, maximalism has positive effect (-0.146) on appreciating job competition when working in the case of men. Perhaps men are either maximalist and competing with themselves or competitive enjoying competition with others?

Childhood competitiveness (0.244), love (0.096) and impact of competition (0.257); adolescent impact of competition (0.157); positive impact in the present (0.120) and positive evaluation of competition among colleagues within an organization (0.111) will all indirectly make females enjoy job competition while working.

For men, we can face a different set of indirect effects, viz., competitiveness (0.345), being an individual player (0.124), predilection (0.214), effect (0.180) of competition in childhood, competitiveness (0.139) and influence of competition in adolescence (0.080).

The difference between the two genders originates from the effect of maximalism and the lack of indirect effects in the present in the case of men.

4. **DISCUSSION**

This paper primarily aims to observe and track the alterations of personality from infancy to maturity, and analyze the subsequent knock-on effects of educational institutions and physical activities at a young age on competitive situations in the workplace. Personality of teenagers is predominantly clinched by the connate characteristics of infancy. Preference for competition during infancy is almost equivalent for both women and men. Howbeit, the determinants of competitivity during juvenility diverged between the two sexes. The team-oriented mindset is the root reason of divergence. It has a positive influence on competing character solely in the case of men. This positive effect is further strengthened by failure management, too, which is also perceivable as an early motivating factor.

As regards the development of personality in childhood, frequency of participation in competitions has a great importance. This is primarily defined by the predilection for competition, which, interestingly, is not linked to team player attitude in either of the genders. Concerning women, this means an excessive negative effect while the competitiveness-boosting role of individual player mentality is the dominant factor. The big difference between women and men in adolescence is the positivity of personality, which modifies with three further dimensions in case of men: competitiveness, single player / group player mentality, and failure as an incentive for a fresh start. These cause the deviation of attitudes relating to competing between the two genders. Although the effect of individual player personality directly applies to women, this is the most decisive factor of male predisposition to competition by the indirect effects. A new determinant appears in adult life, namely, maximalism. Although it is already observable in childhood, it only becomes truly significant by now. The impact of competition on the individual in adulthood presents a clear view in case of men because the impact of various other – mostly indirect – determinants also exists apart from the preference for competition persisting in adulthood.

It can therefore be stated regarding the hypotheses that the individual player personality and predilection for competition proved to be defining factors in case of both genders, which means that the first hypothesis has been established. The second hypothesis was proven most importantly in the area of maximalism. This personality trait as an incentive manifests in both childhood and adulthood but it has its effect clearly only in adulthood. As a consequence of the analysis of the two SEM models, it is concludable regarding the third hypothesis that although the model is more complicate in case of women, impact of personality on the attitude towards competition is more sophisticated in case of men, what is primarily attributable to indirect effects. As a result, the third hypothesis has also been verified.

5. CONCLUSIONS

This current investigation is the first step of a research, the aim of which was to assess whether the effect of childhood and adolescent personality traits on behavior in subsequent competitive situations in the workplace was detectable. Furthermore, the authors investigated which motivations played a role in the development of preference for competition and in participation in competition. The objective is to establish a method by which the organizational attitude of the applicants for a given job position is measurable. Additionally, the authors defined the elaboration of such a preliminary methodological tool that helps the realization of individualized education and career orientation already in school-age children. Based on the obtained findings, these targets seem to be undoubtedly viable in the future.

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Code	Scale	Females	Males
2a	ADO - Positive personality	0.292	0.298
2b	ADO - Competitiveness	0.535	0.526
2c	ADO - Individual player	0.383	0.499
2d	ADO - Team player	0.291	0.238
2e	ADO - Extroverted	0.414	0.287
2f	ADO - Failure management	0.402	0.353
11	CHD - Frequency of Competition	0.198	0.164
12	CHD - Love of Competition	0.371	0.447
13	CHD - Impact of Competition	0.019	0.188
14	ADO - Frequency of Competition	0.545	0.678
15	ADO - Love of Competition	0.664	0.741
16	ADO - Impact of Competition	0.526	0.670
18	18 - Dimensions of Maximalism	0.310	0.266
21	21 - Motivators of Competition	0.360	0.310
26	26 - Impact on the Individual	0.415	0.500
27	27 - How do you evaluate competition among colleagues within an organization? What impact does it have on an organization?	0.138	0.279
19	19 - Do you usually compete with your co-workers at work (while working)?	0.225	0.218
20	20 - Who do you compete with?	0.474	0.430
25	25 - Do you enjoy job competitions while working?	0.416	0.424
Tabl	e 2. Squared multiple correlations – explained variance of the scales (CHE ADOLESCENT)	P = CHILD, A	ADO =

Appendix A. Squared multiple correlations

Appendix B. SEM models

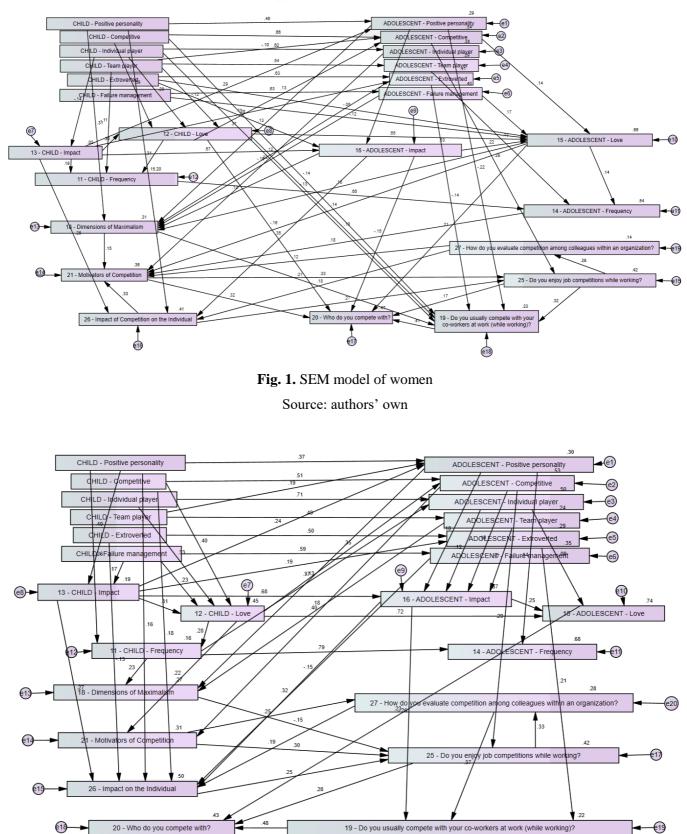


Fig. 2. SEM model of men Source: authors' own

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		Females'	model					Males' model				
Effect	Estimate	S.E.	St. Est.	C.R.	Sig.	Effect	Estimate	S.E.	St. Est.	C.R.	Sig.	
2a <- 1a	0.467	0.051	0.456	9.121	< 0.001	2a <- 1a	0.328	0.075	0.370	4.376	< 0.001	
2a <- 13	0.500	0.086	0.290	5.806	< 0.001	2a <- 1d	0.164	0.067	0.189	2.444	0.015	
2b <- 1b	0.643	0.043	0.662	15.056	< 0.001	2a <- 13	0.329	0.117	0.237	2.801	0.005	
2b <- 1d	-0.099	0.039	-0.103	-2.537	0.011	2b <- 1b	0.533	0.073	0.507	7.302	< 0.001	
2b <- 12	0.186	0.064	0.129	2.920	0.003	2b <- 12	0.542	0.106	0.355	5.116	< 0.001	
2c <- 1c	0.636	0.048	0.618	13.265	< 0.001	2c <- 1c	0.658	0.061	0.706	10.742	< 0.001	
2d <- 1d	0.550	0.051	0.540	10.800	< 0.001	2c <- 11	-0.176	0.088	-0.132	-2.005	0.045	
2e <- 1e	0.645	0.046	0.634	13.954	< 0.001	2d <- 1d	0.463	0.077	0.488	6.047	< 0.001	
2e <- 13	0.189	0.079	0.109	2.390	0.017	2e <- 1e	0.452	0.071	0.500	6.402	< 0.001	
2f <- 1f	0.654	0.047	0.634	13.814	< 0.001	2e <- 13	0.264	0.107	0.192	2.461	0.014	
11 <- 1d	-0.078	0.038	-0.108	-2.022	0.043	2f <- 1f	0.534	0.067	0.594	7.987	< 0.001	
11 <- 12	0.337	0.061	0.314	5.480	< 0.001	11 <- 1a	0.187	0.061	0.263	3.084	0.002	
11 <- 13	0.233	0.069	0.193	3.394	< 0.001	11 <- 12	0.315	0.097	0.277	3.248	0.001	
12 <- 1b	0.263	0.032	0.390	8.284	< 0.001	12 <- 1b	0.274	0.047	0.397	5.777	< 0.001	
12 <- 1c	0.191	0.032	0.288	6.057	< 0.001	12 <- 1c	0.206	0.042	0.335	4.869	< 0.001	
12 <- 1d	-0.077	0.031	-0.115	-2.447	0.014	12 <- 1f	0.146	0.044	0.232	3.319	< 0.001	
12 <- 13	0.441	0.053	0.393	8.276	< 0.001	12 <- 13	0.307	0.068	0.314	4.496	< 0.001	
13 <- 1c	-0.081	0.035	-0.137	-2.332	0.020	13 <- 1a	0.254	0.053	0.399	4.783	< 0.001	
14 <- 2d	-0.090	0.029	-0.125	-3.117	0.002	13 <- 1f	0.110	0.054	0.170	2.037	0.042	
14 <- 11	0.677	0.044	0.659	15.530	< 0.001	14 <- 2a	0.114	0.044	0.139	2.618	0.009	
14 <- 15	0.143	0.043	0.140	3.299	< 0.001	14 <- 11	0.812	0.055	0.790	14.882	< 0.001	
15 <- 1e	-0.058	0.024	-0.082	-2.371	0.018	15 <- 2c	0.066	0.035	0.092	1.915	0.055	
15 <- 1f	-0.085	0.031	-0.121	-2.712	0.007	15 <- 12	0.782	0.055	0.719	14.109	< 0.001	
15 <- 2b	0.104	0.028	0.139	3.701	< 0.001	15 <- 16	0.241	0.049	0.248	4.948	< 0.001	
15 <- 2f	0.117	0.031	0.171	3.837	< 0.001	16 <- 2a	0.143	0.046	0.181	3.135	0.002	
15 <- 12	0.704	0.042	0.654	16.827	< 0.001	16 <- 2b	0.076	0.039	0.104	1.932	0.053	
15 <- 16	0.222	0.036	0.222	6.205	< 0.001	16 <- 2c	0.089	0.039	0.120	2.250	0.024	
16 <- 1e	0.059	0.029	0.084	2.053	0.040	16 <- 2d	0.124	0.038	0.171	3.213	0.001	
16 <- 2a	0.100	0.030	0.143	3.350	< 0.001	16 <- 13	0.749	0.064	0.683	11.778	< 0.001	
16 <- 13	0.804	0.052	0.666	15.607	< 0.001	18 <- 2a	0.281	0.061	0.373	4.629	< 0.001	
18 <- 1a	0.184	0.033	0.307	5.514	< 0.001	18 <- 2d	0.126	0.055	0.184	2.312	0.021	
18 <- 2a	0.074	0.034	0.128	2.164	0.030	18 <- 11	0.217	0.075	0.231	2.876	0.004	
18 <- 2e	0.069	0.029	0.120	2.402	0.016	19 <- 2f	0.260	0.104	0.205	2.501	0.012	
18 <- 2f	0.128	0.028	0.224	4.514	< 0.001	19 <- 16	-0.422	0.133	-0.262	-3.173	0.002	
18 <- 15	0.149	0.045	0.180	3.349	< 0.001	19 <- 27	0.386	0.087	0.365	4.440	< 0.001	
18 <- 16	0.100	0.047	0.121	2.121	0.034	20 <- 15	0.346	0.110	0.233	3.152	0.002	
19 <- 1b	-0.116	0.048	-0.139	-2.397	0.017	20 <- 19	0.426	0.063	0.476	6.743	< 0.001	
19 <- 1c	-0.107	0.045	-0.129	-2.377	0.017	20 <- 25	0.226	0.060	0.282	3.787	< 0.001	
19 <- 2a	-0.178	0.045	-0.221	-3.946	< 0.001	21 <- 2b	0.321	0.074	0.400	4.334	< 0.001	
19 <- 2e	-0.110	0.042	-0.137	-2.599	0.009	21 <- 12	0.274	0.113	0.224	2.421	0.015	
19 <- 12	0.220	0.075	0.177	2.925	0.003	25 <- 2b	0.389	0.111	0.295	3.512	< 0.001	

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19 <- 18	0.293	0.079	0.211	3.703	< 0.001
19 <- 25	0.227	0.039	0.325	5.845	< 0.001
20 <- 12	-0.241	0.104	-0.156	-2.323	0.020
20 <- 15	0.296	0.102	0.207	2.912	0.004
20 <- 16	-0.218	0.069	-0.152	-3.158	0.002
20 <- 19	0.514	0.057	0.414	8.989	< 0.001
20 <- 21	0.355	0.058	0.323	6.148	< 0.001
20 <- 25	0.149	0.046	0.171	3.233	0.001
21 <- 2c	-0.091	0.043	-0.101	-2.109	0.035
21 <- 14	0.230	0.065	0.181	3.546	< 0.001
21 <- 15	0.188	0.070	0.144	2.689	0.007
21 <- 18	0.233	0.078	0.148	2.975	0.003
21 <- 26	0.412	0.065	0.331	6.345	< 0.001
21 <- 27	0.130	0.057	0.121	2.286	0.022
25 <- 2b	0.362	0.056	0.294	6.421	< 0.001
25 <- 21	0.415	0.067	0.327	6.148	< 0.001
25 <- 26	0.423	0.083	0.268	5.085	< 0.001
26 <- 1a	0.111	0.034	0.148	3.241	0.001
26 <- 13	0.320	0.081	0.253	3.932	< 0.001
26 <- 16	0.367	0.068	0.350	5.428	< 0.001
26 <- 27	0.156	0.042	0.181	3.720	< 0.001
27 <- 25	0.212	0.044	0.289	4.774	< 0.001

25 <- 18	-0.276	0.134	-0.146	-2.064	0.039
25 <- 21	0.489	0.137	0.297	3.574	< 0.001
25 <- 26	0.402	0.124	0.248	3.255	0.001
26 <- 1b	0.138	0.057	0.161	2.394	0.017
26 <- 1c	0.139	0.051	0.182	2.750	0.006
26 <- 1e	-0.120	0.052	-0.149	-2.286	0.022
26 <- 2f	-0.127	0.057	-0.145	-2.211	0.027
26 <- 13	0.326	0.124	0.268	2.621	0.009
26 <- 16	0.352	0.114	0.318	3.096	0.002
26 <- 27	0.139	0.051	0.191	2.749	0.006
27 <- 21	0.351	0.128	0.251	2.749	0.006
27 <- 25	0.281	0.079	0.331	3.555	< 0.001

Fig. 3. Regression weights statistics of the SEM models

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	1a	1b	1c	1d	1e	1f	2a	2b	2f	12	13	16
20	0.456	0	-0.040	0	0	0	0	0	0	0	0.290	0
2a	(0.456+0)	(0+0)	(0+-0.040)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.290+0)	(0+0)
	0	0.712	0.030	-0.118	0	0	0	0	0	0.129	0.051	0
2b	(0+0)	(0.662+0.050)	(0+0.030)	(-0.103+-0.015)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.129+0)	(0+0.051)	(0+0)
	0	0	0.618	0	0	0	0	0	0	0	0	0
2c	(0+0)	(0+0)	(0.618+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
• •	0	0	0	0.540	0	0	0	0	0	0	0	0
2d	(0+0)	(0+0)	(0+0)	(0.540+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	0	0	-0.015	0	0.634	0	0	0	0	0	0.109	0
2e	(0+0)	(0+0)	(0+-0.015)	(0+0)	(0.634+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.109+0)	(0+0)
	0	0	0	0	0	0.634	0	0	0	0	0	0
2f	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.634+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	0	0.122	0.047	-0.144	0	0	0	0	0	0.314	0.316	0
11	(0+0)	(0+0.122)	(0+0.047)	(-0.108+-0.036)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.314+0)	(0.193+0.123)	(0+0)
	0	0.39	0.234	-0.115	0	0	0	0	0	0	0.393	0
12	(0+0)	(0.39+0)	(0.288+-0.054)	(-0.115+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.393+0)	(0+0)
	0	0	-0.137	0	0	0	0	0	0	0	0	0
13	(0+0)	(0+0)	(-0.137+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	0.002	0.130	0.050	-0.176	-0.009	-0.002	0.004	0.019	0.024	0.301	0.267	0.031
14	(0+0.002)	(0+0.130)	(0+0.050)	(0+-0.176)	(0+-0.009)	(0+-0.002)	(0+0.004)	(0+0.019)	(0+0.024)	(0+0.301)	(0+0.267)	(0+0.031)
	0.014	0.354	0.135	-0.092	-0.063	-0.012	0.032	0.139	0.171	0.672	0.421	0.222
15	(0+0.014)	(0+0.354)	(0+0.135)	(0+-0.092)	(-0.082+0.019)	(-0.121+0.108)	(0+0.032)	(0.139+0)	(0.171+0)	(0.654+0.018)	(0+0.421)	(0.222+0)
	0.065	0	-0.097	0	0.084	0	0.143	0	0	0	0.707	0
16	(0+0.065)	(0+0)	(0+-0.097)	(0+0)	(0.084+0)	(0+0)	(0.143+0)	(0+0)	(0+0)	(0+0)	(0.666+0.041)	(0+0)
10	0.376	0.064	0.006	-0.016	0.075	0.140	0.151	0.025	0.254	0.121	0.211	0.161
18	(0.307+0.069)	(0+0.064)	(0+0.006)	(0+-0.016)	(0+0.075)	(0+0.140)	(0.128+0.023)	(0+0.025)	(0.224+0.031)	(0+0.121)	(0+0.211)	(0.121+0.04)

Appendix C. Standardised total and (direct + indirect) effects

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10	0.007	0.023	-0.085	-0.041	-0.068	0.032	-0.179	0.107	0.061	0.234	0.119	0.085
19	(0+0.007)	(-0.139+0.162)	(-0.129+0.044)	(0+-0.041)	(0+-0.068)	(0+0.032)	(-0.221+0.041)	(0+0.107)	(0+0.061)	(0.177+0.057)	(0+0.119)	(0+0.085)
•	0.049	0.095	-0.052	-0.043	-0.048	0.018	-0.070	0.141	0.086	0.152	0.115	0.016
20	(0+0.049)	(0+0.095)	(0+-0.052)	(0+-0.043)	(0+-0.048)	(0+0.018)	(0+-0.070)	(0+0.141)	(0+0.086)	(-0.156+0.308)	(0+0.115)	(-0.152+0.168)
	0.119	0.097	-0.057	-0.05	0.011	0.019	0.046	0.044	0.068	0.174	0.319	0.185
21	(0+0.119)	(0+0.097)	(0+-0.057)	(0+-0.05)	(0+0.011)	(0+0.019)	(0+0.046)	(0+0.044)	(0+0.068)	(0+0.174)	(0+0.319)	(0+0.185)
	0.086	0.244	-0.029	-0.052	0.012	0.006	0.029	0.312	0.023	0.096	0.257	0.157
25	(0+0.086)	(0+0.244)	(0+-0.029)	(0+-0.052)	(0+0.012)	(0+0.006)	(0+0.029)	(0.294+0.019)	(0+0.023)	(0+0.096)	(0+0.257)	(0+0.157)
	0.175	0.013	-0.07	-0.003	0.03	0	0.052	0.016	0.001	0.005	0.514	0.358
26	(0.148+0.027)	(0+0.013)	(0+-0.07)	(0+-0.003)	(0+0.03)	(0+0)	(0+0.052)	(0+0.016)	(0+0.001)	(0+0.005)	(0.253+0.261)	(0.350+0.008)
	0.025	0.070	-0.008	-0.015	0.003	0.002	0.008	0.09	0.006	0.028	0.074	0.045
27	(0+0.025)	(0+0.070)	(0+-0.008)	(0+-0.015)	(0+0.003)	(0+0.002)	(0+0.008)	(0+0.09)	(0+0.006)	(0+0.028)	(0+0.074)	(0+0.045)

 Table 3. Standardised total and (direct + indirect) effects – women

Journal of International Scientific Publications www.scientific-publications.net

Economy & Business

ISSN 1314-7242, Volume 14, 2020

	2c	2d	2e	11	14	15	18	19	21	25	26	27
2-	0	0	0	0	0	0	0	0	0	0	0	0
2c	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	0	-0.125	0	0.659	0	0.140	0	0	0	0	0	0
14	(0+0)	(-0.125+0)	(0+0)	(0.659+0)	(0+0)	(0.140+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	0	0	0.120	0	0	0.180	0	0	0	0	0	0
18	(0+0)	(0+0)	(0.120+0)	(0+0)	(0+0)	(0.180+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	-0.011	-0.002	-0.110	0.013	0.020	0.060	0.227	0	0.110	0.335	0.126	0.036
19	(0+-0.011)	(0+-0.002)	(-0.137+0.027)	(0+0.013)	(0+0.020)	(0+0.060)	(0.211+0.016)	(0+0)	(0+0.110)	(0.325+0.01)	(0+0.126)	(0+0.036)
	-0.044	-0.010	-0.039	0.051	0.078	0.307	0.152	0.414	0.432	0.333	0.232	0.094
20	(0+-0.044)	(0+-0.010)	(0+-0.039)	(0+0.051)	(0+0.078)	(0.207+0.101)	(0+0.152)	(0.414+0)	(0.323+0.109)	(0.171+0.162)	(0+0.232)	(0+0.094)
	-0.102	-0.023	0.018	0.121	0.184	0.200	0.151	0	0.018	0.054	0.351	0.186
21	(-0.101+-0.002)	(0+-0.023)	(0+0.018)	(0+0.121)	(0.181+0.003)	(0.144+0.055)	(0.148+0.003)	(0+0)	(0+0.018)	(0+0.054)	(0.331+0.02)	(0.121+0.066)
	-0.034	-0.008	0.006	0.04	0.061	0.066	0.050	0	0.338	0.032	0.388	0.111
25	(0+-0.034)	(0+-0.008)	(0+0.006)	(0+0.04)	(0+0.061)	(0+0.066)	(0+0.05)	(0+0)	(0.327+0.01)	(0+0.032)	(0.268+0.12)	(0+0.111)
	-0.002	0	0	0.002	0.003	0.003	0.003	0	0.018	0.054	0.02	0.186
26	(0+-0.002)	(0+0)	(0+0)	(0+0.002)	(0+0.003)	(0+0.003)	(0+0.003)	(0+0)	(0+0.018)	(0+0.054)	(0+0.02)	(0.181+0.006)
	-0.010	-0.002	0.002	0.012	0.018	0.019	0.014	0	0.097	0.298	0.112	0.032
27	(0+-0.010)	(0+-0.002)	(0+0.002)	(0+0.012)	(0+0.018)	(0+0.019)	(0+0.014)	(0+0)	(0+0.097)	(0.289+0.009)	(0+0.112)	(0+0.032)

Table 4. Standardised total and (direct + indirect) effects - women

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	1a	1b	1c	1d	1f	2a	2b	2c	2d	11	12	13
•	0.464	0	0	0.189	0.04	0	0	0	0	0	0	0.237
2a	(0.37+0.094)	(0+0)	(0+0)	(0.189+0)	(0+0.04)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.237+0)
	0.044	0.648	0.119	0	0.101	0	0	0	0	0	0.355	0.111
2b	(0+0.044)	(0.507+0.141)	(0+0.119)	(0+0)	(0+0.101)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.355+0)	(0+0.111)
	-0.039	-0.014	0.694	0	-0.01	0	0	0	0	-0.132	-0.036	-0.011
2c	(0+-0.039)	(0+-0.014)	(0.706+-0.012)	(0+0)	(0+-0.01)	(0+0)	(0+0)	(0+0)	(0+0)	(-0.132+0)	(0+-0.036)	(0+-0.011)
	0	0	0	0.488	0	0	0	0	0	0	0	0
2d	(0+0)	(0+0)	(0+0)	(0.488+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	0	0	0	0	0.594	0	0	0	0	0	0	0
2f	(0+0)	(0+0)	(0+0)	(0+0)	(0.594+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	0.077	0	0	0	0.033	0	0	0	0	0	0	0.192
2e	(0+0.077)	(0+0)	(0+0)	(0+0)	(0+0.033)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.192+0)
	0.297	0.11	0.093	0	0.079	0	0	0	0	0	0.277	0.087
11	(0.263+0.035)	(0+0.11)	(0+0.093)	(0+0)	(0+0.079)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.277+0)	(0+0.087)
	0.125	0.397	0.335	0	0.285	0	0	0	0	0	0	0.314
12	(0+0.125)	(0.397+0)	(0.335+0)	(0+0)	(0.232+0.053)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0.314+0)
	0.399	0	0	0	0.170	0	0	0	0	0	0	0
13	(0.399+0)	(0+0)	(0+0)	(0+0)	(0.170+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	0.175	0.300	0.328	0.029	0.237	0.045	0.026	0.122	0.043	-0.016	0.723	0.407
15	(0+0.175)	(0+0.300)	(0+0.328)	(0+0.029)	(0+0.237)	(0+0.045)	(0+0.026)	(0.092+0.030)	(0+0.043)	(0+-0.016)	(0.719+0.005)	(0+0.407)
	0.299	0.087	0.073	0.026	0.068	0.139	0	0	0	0.79	0.219	0.102
14	(0+0.299)	(0+0.087)	(0+0.073)	(0+0.026)	(0+0.068)	(0.139+0)	(0+0)	(0+0)	(0+0)	(0.79+0)	(0+0.219)	(0+0.102)
	0.356	0.065	0.095	0.118	0.132	0.181	0.104	0.12	0.171	-0.016	0.032	0.736
16	(0+0.356)	(0+0.065)	(0+0.095)	(0+0.118)	(0+0.132)	(0.181+0)	(0.104+0)	(0.12+0)	(0.171+0)	(0+-0.016)	(0+0.032)	(0.683+0.053)
	0.242	0.025	0.021	0.160	0.033	0.373	0	0	0.184	0.231	0.064	0.108
18	(0+0.242)	(0+0.025)	(0+0.021)	(0+0.160)	(0+0.033)	(0.373+0)	(0+0)	(0+0)	(0.184+0)	(0.231+0)	(0+0.064)	(0+0.108)
	-0.083	0.057	0.001	-0.033	0.104	-0.052	0.062	-0.03	-0.047	0	0.051	-0.16
19	(0+-0.083)	(0+0.057)	(0+0.001)	(0+-0.033)	(0+0.104)	(0+-0.052)	(0+0.062)	(0+-0.03)	(0+-0.047)	(0+0)	(0+0.051)	(0+-0.16)
	(1 01000)	(((.))	((=)	((((* * *)	((

20	0.014	0.194	0.112	-0.013	0.121	-0.026	0.158	0.017	-0.016	-0.014	0.253	0.069
20	(0+0.014)	(0+0.194)	(0+0.112)	(0+-0.013)	(0+0.121)	(0+-0.026)	(0+0.158)	(0+0.017)	(0+-0.016)	(0+-0.014)	(0+0.253)	(0+0.069)
	0.046	0.348	0.122	0	0.104	0	0.4	0	0	0	0.366	0.115
21	(0+0.046)	(0+0.348)	(0+0.122)	(0+0)	(0+0.104)	(0+0)	(0.4+0)	(0+0)	(0+0)	(0+0)	(0.224+0.142)	(0+0.115)
	0.047	0.345	0.124	-0.014	0.058	-0.041	0.433	0.01	-0.014	-0.036	0.214	0.18
25	(0+0.047)	(0+0.345)	(0+0.124)	(0+-0.014)	(0+0.058)	(0+-0.041)	(0.295+0.139)	(0+0.01)	(0+-0.014)	(0+-0.036)	(0+0.214)	(0+0.18)
•	0.225	0.220	0.226	0.037	0.010	0.055	0.08	0.039	0.054	-0.007	0.041	0.519
26	(0+0.225)	(0.161+0.059)	(0.182+0.044)	(0+0.037)	(0+0.010)	(0+0.055)	(0+0.08)	(0+0.039)	(0+0.054)	(0+-0.007)	(0+0.041)	(0.268+0.251)
	0.027	0.202	0.072	-0.005	0.045	-0.014	0.244	0.003	-0.005	-0.012	0.163	0.088
27	(0+0.027)	(0+0.202)	(0+0.072)	(0+-0.005)	(0+0.045)	(0+-0.014)	(0+0.244)	(0+0.003)	(0+-0.005)	(0+-0.012)	(0+0.163)	(0+0.088)

Table 5. Standardised total and (direct + indirect) effects - men

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	1e	2f	15	16	18	19	21	25	26	27
2-	0.500	0	0	0	0	0	0	0	0	0
2e	(0.500+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	0	0	0	0	0	0	0	0	0	0
14	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	0	0	0	0.248	0	0	0	0	0	0
15	(0+0)	(0+0)	(0+0)	(0.248+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)	(0+0)
	-0.005	0.201	0	-0.252	-0.018	0	0.130	0.123	0.030	0.371
19	(0+-0.005)	(0.205+-0.004)	(0+0)	(-0.262+0.010)	(0+-0.018)	(0+0)	(0+0.130)	(0+0.123)	(0+0.030)	(0.365+0.006)
	-0.013	0.085	0.233	-0.039	-0.050	0.476	0.150	0.345	0.086	0.190
20	(0+-0.013)	(0+0.085)	(0.233+0)	(0+-0.039)	(0+-0.050)	(0.476+0)	(0+0.15)	0.282+0.063)	(0+0.086)	(0+0.190)
	-0.038	-0.037	0	0.080	-0.149	0	0.314	0.016	0.252	0.048
25	(0+-0.038)	(0+-0.037)	(0+0)	(0+0.080)	(-0.146+-0.002)	(0+0)	(0.297+0.017)	(0+0.016)	(0.248+0.004)	(0+0.048)
	-0.152	-0.148	0	0.323	-0.009	0	0.068	0.064	0.016	0.194
26	(-0.149+-0.002)	(-0.145+-0.002)	(0+0)	(0.318+0.005)	(0+-0.009)	(0+0)	(0+0.068)	(0+0.064)	(0+0.016)	(0.191+0.003)
	-0.012	-0.012	0	0.027	-0.049	0	0.355	0.336	0.083	0.016
27	(0+-0.012)	(0+-0.012)	(0+0)	(0+0.027)	(0+-0.049)	(0+0)	(0.251+0.104)	(0.331+0.005)	(0+0.083)	(0+0.016)

Table 6. Standardized total and (direct + indirect) effects - men