# Gambling and the Couple: Comparing Gamblers' and Spouses' Views on Family, Marital and Individual Levels

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#### Abstract

This study compares the perspectives of 19 pathological gamblers with those of 13 pathological gamblers' spouses (N = 31) with regard to family (i.e., family functioning and quality of life), marital variables (i.e., dvadic adjustment and marital satisfaction) and individual variables (i.e., congruence, differentiation of the self and psychopathological symptomatology). Regarding individual functioning, the gamblers and spouses presented with psychological symptomatology, as both had values that are typical for emotionally disturbed populations. Moreover, the gamblers showed additional difficulties with regard to congruence. The results show that the gamblers' perspectives on family and marital life were less affected by difficulties, yet this difference was most pronounced in marital life. The primary limitations of the current study are regarding the independence of the subsamples (i.e., the participants were married or had marital life partners but were not couples) and the small sample size. Nevertheless, the current results call into question the 'truths' that are taken for granted by previous literature (e.g., gambler's perceptions of marital problems) and highlight the challenges that couples' therapists face regarding perspective differences in couples experiencing a gambling problem.

Keywords: Gamblers, Spouses, Families, Couples, Individuals

### Résumé

Cette étude compare le point de vue de 19 joueurs ou joueuses pathologiques avec celui de 13 conjoints ou conjointes de joueurs ou joueuses pathologiques (N = 31) sur leur vie de famille (fonctionnement familial et qualité de la vie en famille) et sur différentes variables conjugales (ajustements liés à la vie à deux et satisfaction conjugale) et individuelles (congruence et différenciation de l'identité et symptômes psychopathologiques). Sur le plan du fonctionnement individuel, les joueurs ou

joueuses et les conjoints ou conjointes présentaient dans les deux cas des symptômes psychologiques, chaque groupe possédant des valeurs typiquement associées aux personnes souffrant de troubles affectifs. Les joueurs ou joueuses présentaient en plus des difficultés supplémentaires relativement à la congruence. Les résultats indiquent que le point de vue des joueurs ou joueuses sur leur vie conjugale et familiale était moins influencé par leurs difficultés, cette différence étant par ailleurs plus marquée en ce qui a trait à la vie conjugale. Les principales limites de l'étude sont le caractère indépendant de chaque sous-groupe (les participants étaient des personnes mariées ou vivant en union conjugale, mais ne constituaient pas des couples) et la petite taille de l'échantillon. Néanmoins, les résultats obtenus appellent à une remise en question des « certitudes » généralement tenues pour acquises dans la littérature (p. ex., sur la perception qu'ont les joueurs ou joueuses de leurs problèmes conjugaux) et mettent en lumière les problèmes que peuvent rencontrer les thérapeutes de couple concernant les différences de perceptions au sein des couples dont l'un des membres souffre d'un problème de jeu.

#### Introduction

Pathological gambling (DSM IV-TR) (American Psychiatric Association, 2000) or gambling disorder (DSM V) (American Psychiatric Association, 2013) is considered an addiction characterized by an individual's completely subordinate relationship with gambling (Cunha & Relvas, 2014a). Despite the negative impacts that this relationship has on individual (e.g., on mental and physical health) (McComb, Lee, & Sprenkle, 2009), family (e.g., negligence towards family and marital needs) (McComb et al., 2009) and social levels (e.g., isolation) (Reith, 2006), pathological gambling is often referred to as a hidden addiction (Ladouceur, 2004; Phillips, 2005). This designation is justified given that pathological gambling has no physical signs of abuse (e.g., needle marks, dilated pupils, or others) (McComb et al., 2009) and the gambler makes an effort to hide any evidence and the extent of the problem from others. This mechanism is also self-deceiving, as it allows gamblers to ignore the worsening of their problem (Downs & Woolrych, 2010).

There may be a reality associated with pathological gambling that is constructed by the gamblers (for themselves and others), a reality that is different and less negative than that experienced by their relatives. In fact, an exploratory study conducted by Ferland et al. (2008) showed that gamblers' spouses perceived the consequences of the gambling problem in a more severe manner than did the gamblers. Nevertheless, literature focusing on this issue is scarce and does not provide consistent results (Cunha, Sotero, & Relvas, in press2). In Portugal, a large project (in which this study was included) is empirically evaluating the Integrative Systemic Model of Pathological Gambling (ISMPG) (Cunha & Relvas, 2014a). A new matrix of results is beginning to support the proposal that gamblers have a less severe perspective on their gambling problem than do their spouses. Specifically, a quantitative study (N = 32 gamblers + 52 control

participants) found that pathological gamblers did not acknowledge that their family realities in global terms differed from that of the general population (Cunha & Relvas, 2014b). This result led the authors to conduct a case study (Cunha et al., in press2) which determined that a gambler had a more positive perspective than did his spouse regarding the problems associated with gambling, particularly those related to marital and family issues. The authors suggested that there may be three explanatory effects for these results, as follows: denial, idealization/guilt relief, and disappointment/retaliation (Cunha et al., in press2). When gamblers are married, their spouses are the first members of the family to feel the impact of the problem (Solano Montero & Megías-Lizancos, 2011). Given the apparent differences in perspectives between spouses and gamblers, it is important to compare the views of each member of this dyad in an encompassing manner.

Therefore, this study aims to quantitatively compare pathological gamblers and pathological gamblers' spouses who are not from the same couples with regard to family variables (i.e., family functioning and quality of life), marital variables (i.e., marital satisfaction and adjustment) and individual variables (i.e., congruence, differentiation of the self and psychopathological symptomatology).

#### Method

#### **Participants**

The sample consisted of 32 participants, of whom 19 were pathological gamblers (PG group) who were married or who had a life partner, and 13 were spouses/ partners of pathological gamblers (GS group). Initially, the sample included an additional three subjects; however, these subjects fulfilled the criteria for both groups (PG and GS) and were thus eliminated. The PG group had an average length of time as part of a marriage/consensual union that was equal to 12.00 years (SD = 12.67). whereas the GS group had an average of 17.08 years (SD = 12.67). The difference between the groups was not statistically significant (p > .05, Mann-Whitney test). When the number of years in a marriage/consensual union was divided into 10-year bands, both groups were more likely to have participants in the 1-10 years of marriage/consensual union band (PG: N = 11, 57.89%; GS: N = 6, 46.15%). It is important to note that all of the participants were married or had a marital life partner but that couples were not present; that is, the PG and GS groups were independent samples. The PG group was primarily composed of male participants (N = 16, 84.21%) with an average age of 40.39 years (SD = 10.70). The majority of participants in this group had an upper secondary education (N = 6, 31.57%) or a bachelor's degree (N = 5, 26.32%) (United Nations Educational Scientific and Cultural Organization (UNESCO) Institute for Statistics, 2012), lived in urban areas (N = 19, 100%) (Statistics Portugal (INE), 2009), and had average socio-economic status (N = 14, 73.68%) (Simões, 1994). The GS group was composed of nine women (69.23%) and four men (30.77%) with an average age of 43.46 years (SD = 10.41). The majority of participants in this group had completed a lower secondary education (N = 4, 30.77%) or had a bachelor's degree (N = 3, 23.08%) (UNESCO Institute for Statistics, 2012), lived in urban areas (N = 13, 100%) (Statistics Portugal (INE), 2009), and had average (N = 3, 23.08%) or low socio-economic status (N = 3, 23.08%) (Simões, 1994). The two groups had no statistically significant differences with regard to socio-demographic variables (p > .05), except for differences in sex (p = .004, Fisher's exact test). These differences were primarily because more females were in GS group than would be expected if these variables were independent (residual 2.0).

### Procedure

Specialized entities in gambling (e.g., Gamblers Anonymous and Families Anonymous) were asked to advertise for participants in the current study among their members. The entities were provided with copies of the protocol, and the person in charge was asked to distribute these copies to anyone who was interested in participating. This advertising resulted in the recruitment of seven PG and eight GS subjects. In addition, online dissemination of the research protocol (via social networks and email) was utilized using the virtual equivalent of the snowball method of recruitment (Goodman, 1961). This online dissemination resulted in the recruitment of 12 PG and 5 GS subjects. In the PG group, there were no statistically significant differences between the two collection methods for any of the study variables (p > .05). In the GS group, there was one statistically significant difference with regard to Family Difficulties (SCORE-15). which had a lower score for the online participants (U(17) = 0.29, p = .008, r = .07). The following criteria were implemented for inclusion/exclusion in the current study: (1) being older than 18 years old; (2) having a diagnosis of pathological gambling; and (3) being married to or having a life partner who is a pathological gambler.

### Ethical Issues

The subjects' participation request was framed by a set of preconditions (i.e., study objectives, respect for confidentiality and anonymity, voluntary participation, and provision of the contact details for the free specialized clinical support service at the authors' host institution), which were described in the cover page of the protocol. Participants did not sign an informed consent form to protect the voluntary, anonymous and confidential nature of the information being collected (American Psychological Association, 2010). The Foundation for Science and Technology (FCT), which is an external agency, both approved of the current study and sponsored the project.

### Instruments

**Questionnaire examining socio-demographic characteristics**. To characterize the sample, a questionnaire examining socio-demographics (e.g., gender, marital status, nationality, residence, age, education and occupation) was administered that took into consideration the need to preserve the anonymity of the participants. It included

questions that permitted the operationalization of the third criterion for inclusion/ exclusion in the sample.

Systemic Clinical Outcome and Routine Evaluation – 15 (SCORE-15) (Stratton, Bland, Janes, & Lask, 2010; Portuguese version by Vilaça, Silva, & Relvas, 2014). SCORE-15 is a self-report instrument that assesses family functioning. It consists of 15 items measuring three dimensions, which are Family Strengths, Family Communication and Family Difficulties, as well as five additional questions that relate to the family routine, the nature and impact of family problems and possible therapeutic needs. The participants evaluate whether each item describes their family according to a five-point Likert scale, in which 1 represents "describes us very well" and 5 represents "describes us very poorly". A higher score corresponds to more problematic family functioning. SCORE-15 has good internal consistency both overall and dimensionally (.82 <  $\alpha$  < .85).

Quality of Life (QOL) (Olson & Barnes, 1982; Portuguese version by Cunha & Relvas, 2015). This instrument assesses the perception of the quality of one's family life. It is a self-report questionnaire that consists of 20 items representing the following four dimensions: (1) Family, Friends, and Health, (2) Time, (3) Media and Community, and (4) Financial Well-Being. The participants respond to the items according to a five-point Likert scale, in which 1 represents "dissatisfied" and 5 represents "extremely satisfied". A higher score corresponds to a better quality of life. This instrument has reasonable/good internal consistency regarding the total scale and all of its dimensions (.72 <  $\alpha$  < .89).

**Dyadic Adjustment Scale (DAS)** (Spanier, 1976; Portuguese version by Lourenço, 2006). The DAS assesses dyadic adjustment through 32 items that are grouped into the following four dimensions: Dyadic Consensus, Dyadic Satisfaction, Affectional Expression, and Dyadic Cohesion. The responses on a Likert scale ranged from 5 to 6 points for most items, whereas two items (items 29 and 30) had dichotomous response scales. Higher scores for the dimensional and total results correspond with better dyadic adjustment. Overall, this instrument has good internal consistency ( $\alpha = .93$ ), and the subscales vary between .65 and .88.

Marital Satisfaction Assessment Scale (*Escala de Avaliação da Satisfação em* Áreas Conjugais [EASAVIC]) (Narciso & Costa, 1996). The Marital Satisfaction Assessment Scale is a self-report instrument consisting of 44 items that are distributed across two large dimensions, which consist of the following areas: (1) Love (i.e., Feelings and Expression of Feelings, Sexuality, Emotional Intimacy, Continuity of the Relationship, and Physical and Psychological Traits) and (2) Functioning (i.e., Functions, Free-time, Autonomy/Privacy, Communication and Conflicts, and Relationships outside of the Family). The participants evaluate their levels of satisfaction regarding various areas of marital life according to a Likert scale, in which 1 represents "not at all satisfied" and 6 represents "completely satisfied". The internal consistency of this scale is very good (Love:  $\alpha = .97$  and Functioning:  $\alpha = .90$ ). **Differentiation of Self Inventory** – **Revised (DSI-R)** (Skowron & Schmitt, 2003; Major, Rodríguez-González, Miranda, Rousselot, & Relvas, 2014). The DSI-R is a self-report inventory consisting of 46 items that assess the differentiation of the self in adults using a Likert scale, in which 1 represents "not true for me" and 6 represents "very true for me". This instrument has the following four dimensions: Emotional Reactivity, Emotional Cut-Off, I-Position and Fusion with Others. A higher score corresponds to a greater differentiation of the self. The DSI-R has good internal consistency for the overall scale ( $\alpha = .86$ ) and the subscales vary between .51 and .86.

**Congruence Scale (CS)** (Lee, 2002; Portuguese version by Cunha, Silva, Vilaça, Gonçalves, & Relvas, in press1). The CS is a self-report questionnaire for adults that consists of 16 items assessing congruence through the relationship with oneself, with others and with life. The 16 items are divided into the following two subscales: Spiritual/Universal and Intra/Interpersonal. Congruence is the central construct of the Congruence Couples Therapy for Pathological Gambling (CCT), which is an intervention model that has been adapted for couples with a pathological gambler element (Lee, 2009). The internal consistency of this scale and its subscales varies between reasonable and very good (.75 <  $\alpha$  < .93).

**Psychopathological Symptom Inventory (BSI)** (Derogatis & Spencer, 1982; Portuguese version by Canavarro, 1999). This instrument is a self-report inventory consisting of 53 items with responses provided on a Likert scale ranging from "never" (0) to "very often" (4). The items encompass the following nine dimensions: Somatization, Obsessions-Compulsions, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. This instrument also provides information regarding the following three global indices: the General Symptom Index (GSI), the Positive Symptom Total (PST) and the Positive Symptom Index (PSI), which summarily rates emotional disorders. The PSI provides the cut-off point after which individuals are (probabilistically) considered emotionally disturbed (PSI  $\ge$  1.70). This instrument has internal consistency ratings that range from "reasonable" to "good" for all of its subscales and global indices (.62 <  $\alpha$  < .80).

South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987; Portuguese version by Lopes, 2009). Previous literature states that the SOGS is the most widely used tool for assessing pathological gambling (Shaffer, 1997). Composed of 20 items that are based on the DSM-III, this instrument evaluates the impact of gambling on various areas in a gambler's life, including family, social, professional, financial and emotional aspects. A gambler is considered pathological when he or she scores 5 or more points out of 20. Higher scores indicate more severe gambling problems. The SOGS also provides data (via informational items that are not included in the calculation of the overall score) regarding the (1) type and frequency of the gambling behavior, (2) amounts involved in the betting process and (3) presence of family and friends with problems related to gambling. In the current study, this instrument had good internal consistency ( $\alpha = .89$ ), which allowed for the operationalization of the second and third criteria for exclusion/inclusion in the sample (e.g., diagnosis of pathological gambling, being the spouse or partner of a pathological gambler,

respectively). Both the PG and GS subjects completed this questionnaire with regard to their own gambling behavior. Therefore, it was possible to eliminate the GS subjects from the sample who had scored within the pathological gambling range, combining conditions to integrate the two groups.

### Results

### Group Comparisons: Dependent Variables

Statistical analyses were conducted on the total scores and all of the dimensions for each instrument using nonparametric statistics; however, the dimensional results should be viewed and interpreted as merely indicative because of the small sample size. This issue is particularly relevant for the instruments with more dimensions (i.e., EASAVIC and BSI). Cohen's (1988, 1992) reference values were used to classify the effect sizes (*r* and *V*: 0.1 – small effect, .3 – medium effect, and .5 – large effect;  $\eta_p^2$ : .01 – small effect, .06 – moderate effect, and .14 – large effect).

The results will be presented from the macro level to the micro level of the ISMPG, i.e., from the family context to the individual context. First, the quality of family life will be discussed (QOL) (Table 1). Both the PG and GS subjects had total and dimensional scores that were similar to the general population, except with regard to the Financial Well-Being and Family, Friends and Health dimensions. For these dimensions, the GS group had lower scores than the general population (if the range that resulted from the difference between the mean and standard deviation is considered) (Cunha & Relvas, 2015). Comparing across the two groups, a Mann-Whitney test indicated that the GS group had higher levels of dissatisfaction than the PG group. This moderate difference was marginally significant for the total score and the Media and Community dimension.

With regard to family functioning (SCORE-15) (Table 1), both the PG and GS groups reported having higher levels of difficulty with family functioning than the general population (Pereira, 2011), which was reflected in their total scores and in the Family Difficulties and Family Communication dimensions (considering the mean and standard deviation). A Mann-Whitney test showed that the groups differed from each other with regard to Family Difficulties, with the GS group reporting higher scores than the PG groups (i.e., suggesting greater difficulty; marginally significant differences and medium effect).

Given the cut-off point that has been proposed in previous literature (Spanier, 1976), the GS group showed poor levels of marital adjustment (DAS) (Table 1). According to a Mann-Whitney test, the differences between the two groups were statistically significant for the total scores, Dyadic Satisfaction and Dyadic Consensus (medium effect), with the GS group having lower scores than the PG group.

Marital satisfaction (the total score; EASAVIC) (Table 1) for the PG and GS groups was lower than for the general population (Pires, 2008), if the range that resulted from the difference between the mean and standard deviation is considered.

	PC	75	5			Reference	Values
Variables	Μ	SD	М	SD	Group Comparison	M	SD
QOL Total	59.74	12.80	51.77	8.92	U(30) = 73.00, p = .054, r =34	62.97	11.31
Media and Community	16.11	3.03	13.54	2.50	U(30) = 62.50, p = .018, r =42	14.93	3.07
Financial Well-Being	12.05	4.85	9.46	3.20	U(30) = 86.50, p = .157	13.92	4.30
Time	15.37	4.87	13.77	4.11	U(30) = 95.00, p = .287	15.70	4.05
Family, Friends and Health	16.21	4.05	15.00	2.45	U(30) = 93.00, p = .254	18.89	3.20
SCORE-15 Total	3.10	0.70	3.41	0.65	U(30) = 152.50, p = .270	2.02	0.58
Family Strengths	2.05	0.82	2.45	0.66	U(30) = 164.00, p = .126	1.90	0.64
Family Difficulties	3.59	0.89	4.14	0.74	U(30) = 169.00, p = .081, r =31	2.06	0.73
Family Communication	3.65	0.89	3.63	0.89	U(30) = 130.00, p = .821	2.22	0.75
DAS Total	103.33	14.6	86.31	20.56	U(30) = 64.00, p = .034, r =38	Scores lov	/er than
						100 = poo	r dyadic
						adjusti	nent
Dyadic Consensus	45.11	5.31	37.92	11.12	U(30) = 69, p = .037, r =37	ı	ı
Dyadic Satisfaction	35.17	6.31	29.77	6.37	U(30) = 63.50, p = .031, r =39	ı	ı
Affectional Expression	8.42	2.12	6.85	3.21	U(30) = 88.00, p = .182	ı	ı
Dyadic Cohesion	14.68	4.58	11.77	5.20	U(30) = 83.50, p = .126	ı	·
EASAVIC Total	176.21	34.55	141.08	49.84	U(30) = 67.50, p = .041, r =36	208.11	31.10
Feelings and Expression of Feelings	26.42	5.60	22.54	8.30	U(30) = 99.00, p = .362	ı	ı
Emotional Intimacy	28.89	6.72	23.54	8.64	U(30) = 78.50, p = .084, r =31	ı	ı
Sexuality	25.00	6.13	20.38	8.65	U(30) = 81.00, p = .108	ı	ı
Continuity of Relationship	12.42	3.53	9.23	4.73	U(30) = 69.50, p = .037, r =37	ı	ı
Physical and Psychological Traits	16.47	3.37	13.31	4.94	U(30) = 61.00, p = .084, r =31	ı	ı
Love	109.21	22.51	89.00	31.75	U(30) = 78.50, p = .084, r =31	ı	ı
Functions	67.00	13.83	52.08	19.38	U(30) = 59.00, p = .013, r =44	ı	ı
Free-time	6.42	1.87	5.15	2.38	U(30) = 88.00, p = .182	ı	ı
Autonomy/Privacy	7.89	1.82	6.77	2.71	U(30) = 93.00, p = .254	ı	ı
Communication and Conflicts	19.05	4.98	13.62	6.17	U(30) = 61.00, p = .016, r =42	ı	ı
Relationships Outside the Family	18.95	4.52	15.92	5.72	U(30) = 86.00, p = .158	ı	ı
Functioning	67.00	13.83	52.08	19.38	U(30) = 67.50, p = .030, r =38	ı	

Table 1 Results of QOL, SCORE-15, DAS and EASAVIC

*Note.* Bold indicates statistical significance ( $p \leq .05$ ).

A Mann-Whitney test indicated that the differences between the groups (in the total scores) were statistically significant (medium effect), with the GS group having a lower score than the PG group. Dimensionally, this trend was maintained, with lower satisfaction levels for the GS group than the PG group (statistically or marginally significant differences; medium effect).

On the individual level, both the PG and GS groups had lower scores on the total congruence scale and for the Intra/Interpersonal dimension (i.e., CS) than the general population (regarding the mean and standard deviation) (Table 2). For the Spiritual/Universal dimension, the PG group had lower scores than the general population, whereas the GS group had similar scores to the general population (regarding the mean and standard deviation) (Cunha, Silva, & Relvas, 2014). A Mann-Whitney test revealed that the differences between the two groups for the total scores and the Spiritual/Universal dimension were marginally significant (medium effect), with lower levels of congruence for the PG group than the GS group.

Regarding the differentiation of the self (DSI-R) (Table 2), both the PG and GS groups scored in accordance with the reference values for the general population (Major et al., 2014). Moreover, a Mann-Whitney test did not show any statistically significant differences between the two groups, which was also evident with regard to the dimensions.

Regarding the psychopathological symptoms (BSI) (Table 2), according to the PSI cut-off for emotionally disturbed populations (> 1.7) (Canavarro, 1999), the GS group's scores showed emotional disturbance (PSI = 1.82). The PG group showed borderline levels of emotional disturbance (PSI = 1.69); however, rounding the values up revealed that members of this group had a high likelihood of becoming emotionally disturbed. A Mann-Whitney test revealed that the two groups did not differ significantly with regard to the global indices (i.e., GSI and PST) or the dimensions of the BSI.

### Group Comparisons: Complementary Questions from the SCORE-15

The words that the participants used to describe their families (i.e., "What words best describe your family?") were categorized into the following three groups: (1) positive (e.g., union, love, respect, support, and harmony), (2) negative (e.g., secretive, distant, jealous, and complex), and (3) neutral (e.g., normal and family). For the PG group, 12 (63.15%) participants used positive words, three (15.79%) used negative words, and three (15.79%) used neutral words (with one missing value). For the GS group, five (38.46%) participants used neutral words to describe their families, five (38.46%) used negative words and three (23.07%) used positive words. To calculate the statistical significance of these differences, the neutral and negative words were combined to satisfy the minimum expected cell frequency assumption for the chi-square test, which indicated that the differences between the PG and GS groups were statistically significant [ $\chi^2(1, N = 31) = 4.13, p = .042$ ]. Given that this was a residual analysis, these difference were primarily because of the following: (1) there were more positive and fewer negative/neutral words listed by the PG group than would

	Р	G	GS			Reference Values	
Variables	M	SD	M	SD	Group Comparison	М	SD
CS Total	60.53	12.60	68.38	10.79	U(30) = 172.50, p = .059, r = .33	78.41	10.36
Spiritual/Universal	27.16	7.89	34.23	11.90	U(30) = 172.50, p = .059, r = .33	39.30	10.34
Intra/Interpersonal	33.37	7.40	34.15	5.93	U(30) = 130.00, p = .821	50.46	8.46
DSI-R Total	3.63	0.53	3.79	0.39	U(30) = 155.00, p = .238	3.88	0.52
Emotional Reactivity	3.21	0.86	3.16	0.58	U(30) = 113.00, p = .705	-	-
I Position	4.04	0.80	4.24	0.58	U(30) = 143.50, p = .448	-	-
Emotional cut-off	4.08	0.70	4.32	0.81	U(30) = 154.00, p = .254	-	-
Fusion with Others	3.20	0.53	3.44	0.69	U(30) = 139.00, p = .570	-	-
PSI	1.69	0.52	1.82	0.56	U(30) = 139.50, p = .570	1.56	0.39
GSI	1.18	0.63	1.25	0.65	U(30) = 132.00, p = 762	.84	0.48
PST	35.00	10.01	35.00	10.50	U(30) = 122.50, p = 970	26.99	11.72
Somatization	0.73	0.47	1.05	0.95	U(30) = 130.00, p = .821	0.57	0.92
Obsessions-compulsions	1.62	0.87	1.60	0.75	U(30) = 127.00, p = 910	0.573	0.916
Interpersonal Sensitivity	1.11	0.81	1.33	0.87	U(30) = 142.50, n = 472	1.29	0.88
Depression	1.44	0.87	1.51	0.79	U(30) = 133.00, n = 734	0.96	0.73
Anxiety	1.14	0.77	1.45	0.88	U(30) = 149.50, n = 323	0.89	0.72
Hostility	1.25	0.68	1.18	0.75	p = .525 U(30) = 115.00, n = .762	0.94	0.77
Phobic Anxiety	0.47	0.55	0.38	0.48	U(30) = 119.00, n = 880	0.89	0.78
Paranoid Ideation	1.43	0.65	1.54	0.93	V(30) = 123.00, n = 1.000	0.42	0.66
Psychoticism	1.15	0.88	1.02	0.73	p = 1.000 U(30) = 113.50, p = .705	1.06	0.79

Table 2Results of CS, DSI-R and BSI

be expected if these variables were independent variables (residual 2.4 and -2.4), and (2) there were fewer positive and more negative/neutral words listed by the GS group than would be expected if these variables were independent (residual -2.4 and 2.4). The magnitude of the differences was medium (V = .43). The question "What is the

main problem/difficulty that your family is currently facing?" triggered a wide range of answers, which were grouped into the following four categories: financial problems (e.g., financial difficulties and economic crisis), gambling, oneself (e.g., "It is me"), and various other responses—specifically, diverse problems, such as health, death in the family, birth of a child, excessive domestic responsibilities, and marriage. For the PG group, nine (47.37%) participants responded that there were financial problems, five (26.32%) mentioned various problems, three (15.79%)considered themselves as the primary family problem, and 2 (10.53%) mentioned gambling. For the GS group, the category "various" was the most representative (N = 6, 46.15%), followed by financial problems (N = 5, 38.46%) and gambling (N = 2, 38.46%)15.38%). A Fisher's exact test revealed that the differences between the groups were not statistically significant (p = .408). Another question was the following: "In your opinion, what treatment would be most useful to help with the gambling problems: individual therapy, couples therapy, family therapy or none?" The majority of PG group subjects chose the individual therapy option (N = 12, 63.16%), five (26.32%) chose family therapy and one (5.26%) chose the "none" option (with one missing value). For the GS group, five (38.46%) chose individual therapy, four (30.77%) chose family therapy, and three (23.08%) chose couples therapy (with one missing value). The differences between the groups were not statistically significant according to the results of a Fisher's exact test (p = .093).

#### **Influence of Socio-Demographic Variables**

A two-way between-groups analysis of variance (two-way ANOVA) (Table 3) was conducted to examine the influences of sex and group (i.e., PG and GS) on the dependent variables (i.e., the total scores). An adjusted alpha level ( $p \le .10$ ) was used to compensate for the small sample size (Stevens, 2009). The interaction effect (sex\*group) did not reach statistical significance for any of the independent variables. The main effect of sex was statistically significant for the QOL, EC, DSI-R and BSI, with higher scores for women on the QOL, EC and DSI-R and higher scores for men on the BSI. The effect sizes were moderate to large (.11 <  $\eta_p^2$  < .21). There were statistically significant main effects of group for the QOL, SCORE-15, DAS and EASAVIC, with the GS group having higher scores (i.e., greater difficulty) on the SCORE-15 and lower scores (i.e., greater levels of dissatisfaction) on the QOL, DAS and EASAVIC than the PG group. The effect sizes were moderate to large (.11 <  $\eta_p^2$  < .27).

The influence of the socio-demographic variables on the instruments' total scores (i.e., the dependent variables) within the groups was also examined (with a Mann-Whitney test, chi-square test or Fisher's exact test). The socio-demographic variables (i.e., sex, age, education, and socioeconomic status) were not statistically different across any of the dependent variables (i.e., the total scores) for the PG group. For the GS group, a Mann-Whitney test revealed that women had stronger results (i.e., statistically significant) with regard to quality of life (i.e., the total score) [U(11) = 4, p = .030, r = -.60] (large effect) than men. The remaining socio-demographic variables (i.e., age, education, and socioeconomic status) were not statistically different across any of the dependent variables for the GS group.

		Main effect		
	Interaction effect	Sex	Group (PG; GS)	
QOL	$\begin{array}{l} F(1,28\ )=4.24,\ p=.85\\ F(1,28\ )=0.46,\ p=.50\\ F(1,28\ )=2.03,\ p=.17\\ F(1,28\ )=0.93,\ p=.34 \end{array}$	$F(1,28) = 7.49, p = .01, \eta_p^2 = .21$	$F(1,28) = 10.49, p < .01, \eta_p^2 = .27$	
SCORE-15		F(1,28) = 2.64, p = .12	$F(1,28) = 3.34, p = .08, \eta_p^2 = .11$	
DAS		F(1,28) = 1.86, p = .18	$F(1,28) = 6.43, p = .08, \eta_p^2 = .18$	
EASAVIC		F(1,28) = 0.85, p = .37	$F(1,28) = 5.76, p = .02, \eta_p^2 = .19$	
EC	F(1,28) = 0.37, p = .55	$F(1,28) = 3.47, p = .073, \eta_p^2 = .11$	F(1,28) = 0.22, p = .64	
DSI-R	F(1,28) = 0.92, p = .35	$F(1,28) = 4.20, p = .05, \eta_p^2 = .13$	F(1,28) = 0.21, p = .65	
BSI (GSI)	F(1,28) = 0.14, p = .71	$F(1,28) = 5.20, p = .03, \eta_p^2 = .16$	F(1,28) = 2.30, p = .14	

Table 3Results of Two-way ANOVA (sex\*group)

*Note.* Bold indicates statistical significance ( $p \leq .05$ ).

#### Discussion

The current study's results were organized according to the following three main groups: (1) aspects in which the PG and GS groups showed similar results to the general population; (2) aspects in which both groups scored lower (i.e., less adaptive functioning) than the general population; and (3) aspects in which one group scored within the reference values for the general population, whereas the other group had lower scores (i.e., less adaptive functioning) than the general population. It is important to note the following limitations of the current study prior to discussing the results: it had small sample size (i.e., non-representative), and the participants in each group were not coupled with each other (i.e., independent groups). As such, the results cannot be generalized to other study populations; however, these results are nonetheless useful as possible frames of reference.

For the first issue, the PG and GS groups were similar to the general population with regard to the quality of family life (i.e., QOL) and the differentiation of the self (i.e., DSI-R). However, most previous literature examining this topic posits that PGs have a lower quality of life than does the general population (Grant & Kim, 2005; Scherrer et al., 2005). Regarding the GSs, previous literature has not directly addressed the issue of quality of life, yet, based on the diversity of the difficulties experienced by this specific population (Ferland et al., 2008; Lorenz & Shuttlesworth, 1983; Lorenz & Yaffee, 1988), their quality of life may also be lower than that of the general population. The finding that the GSs were significantly less satisfied with their quality of family life were than the PGs (which was confirmed by the main effect of group evident in the two-way ANOVA) is consistent with results from a case study of a couple (Cunha et al., in press2), which found that the gambler in the couple mainly had areas of satisfaction, whereas the spouse had a more balanced narrative between the areas of satisfaction and dissatisfaction, including quality of life. Regarding the differentiation of the self (DSI-R), both PGs and GSs exhibited autonomous functioning that was associated with adequate levels of closeness to others (Nichols & Schwartz, 2012), having significant relationships (e.g., loved ones) and having current relationships with the family of origin (Major et al., 2014). However, ??these results were evident when examining the difference ranges between the means and standard deviations for the general population. The results revealed that both the PG and GS groups tended to score lower than the general population. It is important to note that these similar results between groups cannot be because of interaction effects in the sample as the sample consisted of married participants who were not part of corresponding couples.

With regard to the second issue, it is interesting to note that the PGs and GSs showed more difficulties than did the general population at both the macro and micro levels considered in the ISMPG (Cunha & Relvas, 2014a), a finding which reflected family and individual levels. Both groups scored lower than general population on family functioning (i.e., SCORE-15) and psychological symptomatology (i.e., BSI). On one hand, this is a surprising result given that a Portuguese exploratory study (Cunha & Relvas, 2014b) found that PGs did not perceive their family functioning as more negative than control participants. However, international literature has proposed that both PGs and GSs should have more difficulty with family functioning than the general population (McComb et al., 2009). Although both groups had more difficulties than the general population with regard to these two aspects, the groups cannot be considered similar given that the GSs mentioned significantly more difficulties with family functioning than the PGs (which was confirmed by the main effect of group evident in the two-way ANOVA). This finding is consistent with previous research showing that the spouse's narrative is more indicative of problems (Cunha et al., in press2; Ferland et al., 2008). Because of differences between previous studies and the current study with regard to sample characteristics, future research is needed to understand better this result. At the micro level of the ISMPG (i.e., the individual level) (Cunha & Relvas, 2014a), both groups showed less adaptive functioning than the general population with regard to psychopathological symptoms; that is, both groups had scores that matched with emotionally disturbed populations. This finding is consistent with previous literature examining pathological gamblers, including a number of Portuguese studies (Cunha et al., in press2; Cunha & Relvas, 2014b). Moreover, international literature suggests that various psychopathological symptoms, which range from emotional to psychosomatic, are commonly experienced by gamblers (Downs & Woolrvch, 2010; Ferland et al., 2008; Lorenz & Yaffee, 1989; McComb et al., 2009) and gamblers' spouses (Hodgins, Shead, & Makarchuk, 2007; Lorenz & Shuttlesworth, 1983; Lorenz & Yaffee, 1988; Lorenz & Yaffee, 1989; McComb et al., 2009). However, most of these studies did not consider the comparative dimension between the gamblers and gamblers' spouses. Therefore, the findings from previous comparative studies are not consistent. Lorenz and Yaffee (1989) identified a greater number of symptoms in the gamblers than in their spouses, whereas the Portuguese case study with a couple showed the opposite pattern. Given these contradictory results and that the aforementioned comparative studies were conducted with couples, future research is needed to shed light on these issues.

Finally, the third group of results shows that the conjugal aspect, which is the intermediate level of the ISMPG (Cunha & Relvas, 2014a), is related to the most dissonant findings between the PG and GS groups. The PGs showed marital adjustment (i.e., DAS) and satisfaction (i.e., EASAVIC) levels that were similar to the general population, whereas the GSs had more difficulties than the general population for these

aspects. Moreover, the GSs were less satisfied with their marital lives and showed poor dvadic adjustment levels when compared to the PGs (as indicated by the main effect of group in the two-way ANOVA). Differences in the dimensions may be specifically related to Dyadic Satisfaction (i.e., DAS), Dyadic Consensus (i.e., DAS), Functions (i.e., EASAVIC), Communication and Conflicts (i.e., EASAVIC) and Continuity of the Relationship (i.e., EASAVIC). This assumption regarding these aspects, in which the GSs differed from the PGs in our sample, is supported by previous literature showing that these areas are the most difficult for couples with gambling problems. For example, Functions (i.e., EASAVIC), which includes items pertaining to financial management, responsibilities, decisions and household chores, may reflect increasing responsibilities on the part of the spouse, as shown by previous studies (Fernández, Rincón, & Álvarez, 2002: Steinberg, 1993). The Communication and Conflicts (i.e., EASAVIC) dimension is related to an aspect that is described as one of the most problematic areas for this population, which is associated with gamblers' lies and deceptions (Ferland et al., 2008; Fernández et al., 2002; Heineman, 1987; Lorenz & Shuttlesworth, 1983; Martínez, Navarro, & Romero, 1993; Steinberg, 1993). The Continuity of the Relationship (i.e., EASAVIC) dimension is another area of difficulty given that a significant proportion (59%) of couples with gambling problems get divorced (Lorenz & Yaffee, 1986). The finding that GSs show high levels of marital difficulty may contrast with findings from the international literature, as both gamblers and their spouses tend to have poorer marital adjustment levels than the general population (Lee & Rovers, 2008; Wright, Sabourin, Mondor, Mcduff, & Mamodhousen, 2007). Additionally, there is evidence indicating that this adjustment is poorer for gamblers than for their spouses (Lee & Rovers, 2008). However, Cunha and Relvas (2014b) found that PGs did not differ from a control group with regard to dyadic adjustment (DAS). When sexuality was utilized as an indicator of marital satisfaction, Lorenz and Yaffee (1989) found results that were consistent with the present findings, with only 34% of the PGs and 19% of the GSs (N =150 couples) reporting being satisfied. With regard to sexual dissatisfaction, the GSs reported being less satisfied than the PGs. In addition to marital issues, congruence (i.e., CS; relationship with oneself, with others and with life) (Cunha et al., 2014) is another topic in which the PGs and GSs differed significantly with regard to scores. Here, the pattern of results is the opposite of the previously discussed pattern, as the GSs showed similar levels of functioning to the general population and the PGs were less congruent, particularly regarding the Spiritual/Universal dimension (i.e., the relationship with spirituality/universality; the deepest level of human nature, as manifested in the consciousness of a universal life force) (Cunha et al., 2014). Previous literature posits that both groups should have lower levels of congruence than the general population (Lee, 2002). However, the aforementioned case study (Cunha et al., in press2) suggests that the gambler's spouse may have a more congruent attitude, which is consistent with the results of the current study.

Given the composition of the two groups, with PGs being mostly men and GSs being mostly women, the dissonant results evident in the current study may be attributed to gender issues. However, the ANOVA interaction effects (sex\*group) did not support this assumption, as none of the effects were statistically significant for any of the dependent variables. Thus, gender did not influence the relationship between the

groups and dependent variables (Pallant, 2015), such that being a man or woman does not explain the contradictory results evident in the current study.

Both the PGs and GSs did not recognize gambling as the main family problem. Financial problems were often mentioned by both groups, which is consistent with previous literature (Dickson-Swift, James, & Kippen, 2005; Lorenz & Yaffee, 1986; Lorenz & Shuttlesworth, 1983; Steinberg, 1993). This shift in focus from the gambling problem to other problems may lead to the conclusion that PGs and GSs do not view gambling as a family problem; rather, both groups view it as a problem on the part of the gambler. However, a number of the PGs claimed that they were the main family problem, which may provide insight regarding two results from the current study: (1) On one hand, the failure of PGs to identify marital problems is surprising, as if the blame and responsibility that they feel regarding the problems caused by their gambling does not allow them to "complain" about the marital relationship (i.e., idealization/guilt relief effect). This may reflect a sort of "denial" of the marital deterioration (i.e., denial effect; Cunha et al., in press2). (2) On the other hand, it is important to remember that these participants (in particular, those in the PG group) may feel reluctant to acknowledge that family and couple therapies may be useful for addressing their gambling problem.

In sum, both the PG and GS groups identified more difficulties concerning family functioning (i.e., SCORE-15) when compared with the general population, whereas the groups had similar results to the general population regarding quality of life (i.e., QOL). The GSs showed higher levels of difficulty and dissatisfaction than the PGs (SCORE-15), even with regard to the use of descriptive terms, as the PGs chose more positive words to describe their families than the GSs. For marital issues (i.e., DAS and EASAVIC), the GSs revealed that they experienced more difficulties. Regarding individual functioning, both groups were on the threshold of emotional disturbance (i.e., BSI), yet only the PG group was categorized as incongruent (i.e., CS). Representing the degrees of difficulty according to a tonal gradation, such that black represents the existence/identification of difficulties and white represents the opposite pattern, the three studied levels (i.e., individual, marital and family) are shown in Figure 1. The presentation of this figure highlights the lack of consensus and even the presence of antagonism between the PGs and GSs with regard to marital variables. These opposing patterns are consistent with the results of the aforementioned study case (Cunha et al., in press2), in which the spouse's perception of relational variables (i.e., family and marital) was more negative than the gambler's perception.

## Conclusion

This results of the current study show that PGs view their family and marital functioning as less marked by difficulties than GSs, and this difference is more evident with regard to marital issues. However, in terms of individual functioning, both the PGs and GSs showed psychopathological symptoms with characteristic values ??similar to emotionally disturbed populations. It should be noted that the PGs had more problems related to congruence than the GSs.

#### GAMBLING AND THE COUPLE



*Figure 1.* Representation of the degree of difficulty experienced by each studied group (PG and GS) in each level studied (darker colours represent greater levels of difficulty).

This study has the following two major limitations: (1) there was marital independence between the two subsamples, i.e., the gamblers and gamblers' spouses belonged to different marital dyads; and (2) a small sample size that limits the implications of the current results (e.g., issues with generalization, a need to use nonparametric statistics and restrictions related to basic analyses). However, this study contributes to the current literature by reducing the empirical gap evident in studies examining the marital lives of PGs. Furthermore, the current results question a number of "truths" that are taken for granted in previous literature (e.g., PGs' perception of marital problems). Couples therapists who work with these dyads should be aware of the challenges that are inherent in divergent perspectives (cf., Cunha et al., in press2).

Future research should focus on developing qualitative or mixed method studies to analyze the narratives of PGs and GSs regarding their marital lives to shed light on the nuances within their perspectives.

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