

ACTUALIZACIÓN SOBRE EL JUEGO DE APUESTAS POR INTERNET

Similitudes y Diferencias entre los Jugadores Patológicos online y Presenciales

Fernando Fernández-Aranda

*Coordinador URTA y Jefe de Grupo CIBERobn
Department of Psychiatry and CIBERobn,
University Hospital of Bellvitge-IDIBELL,
Barcelona, Spain*



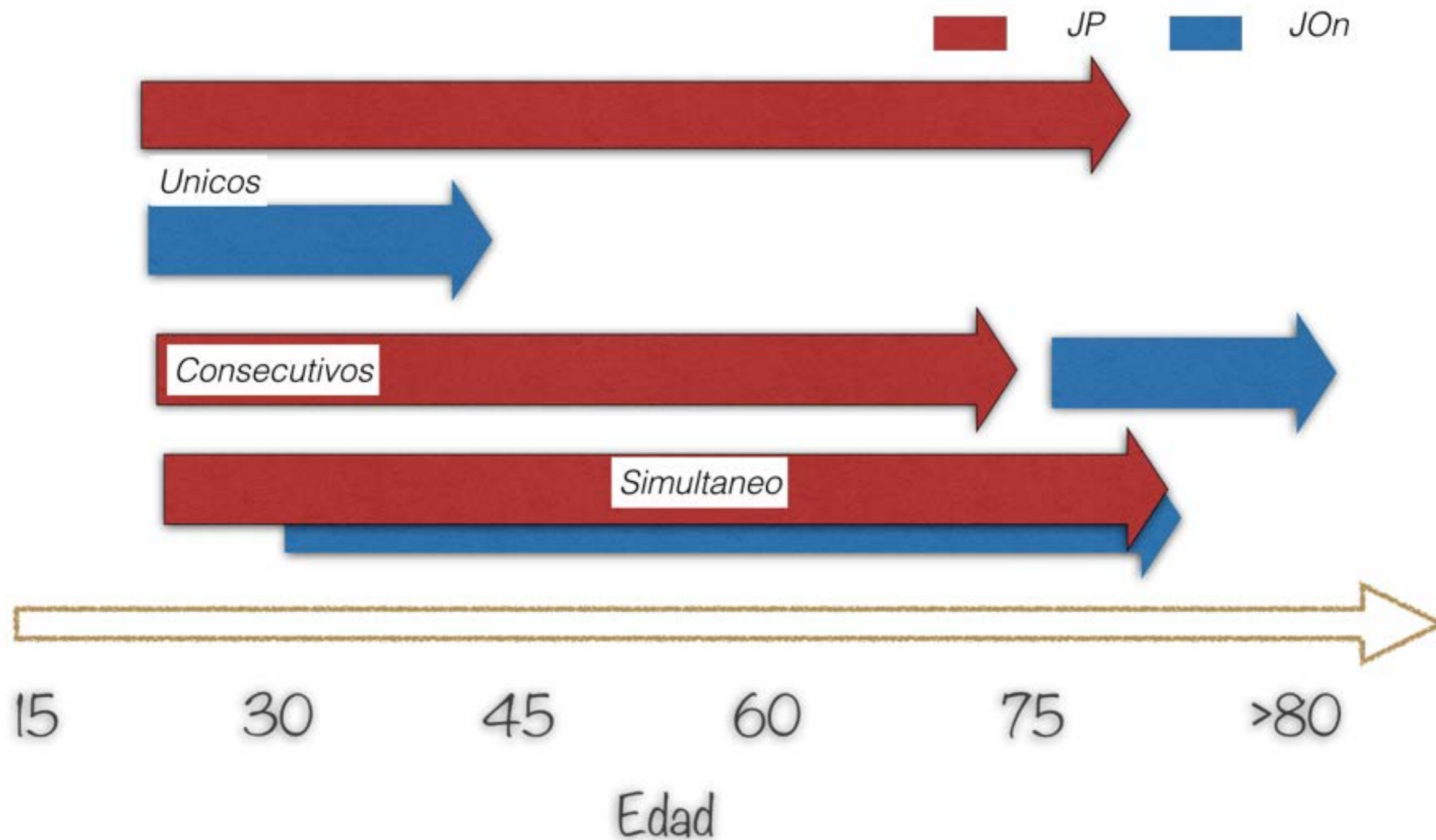
JP tradicional y el JP online

La misma cara de una misma moneda



JP tradicional y el JP online

La misma cara de una misma moneda



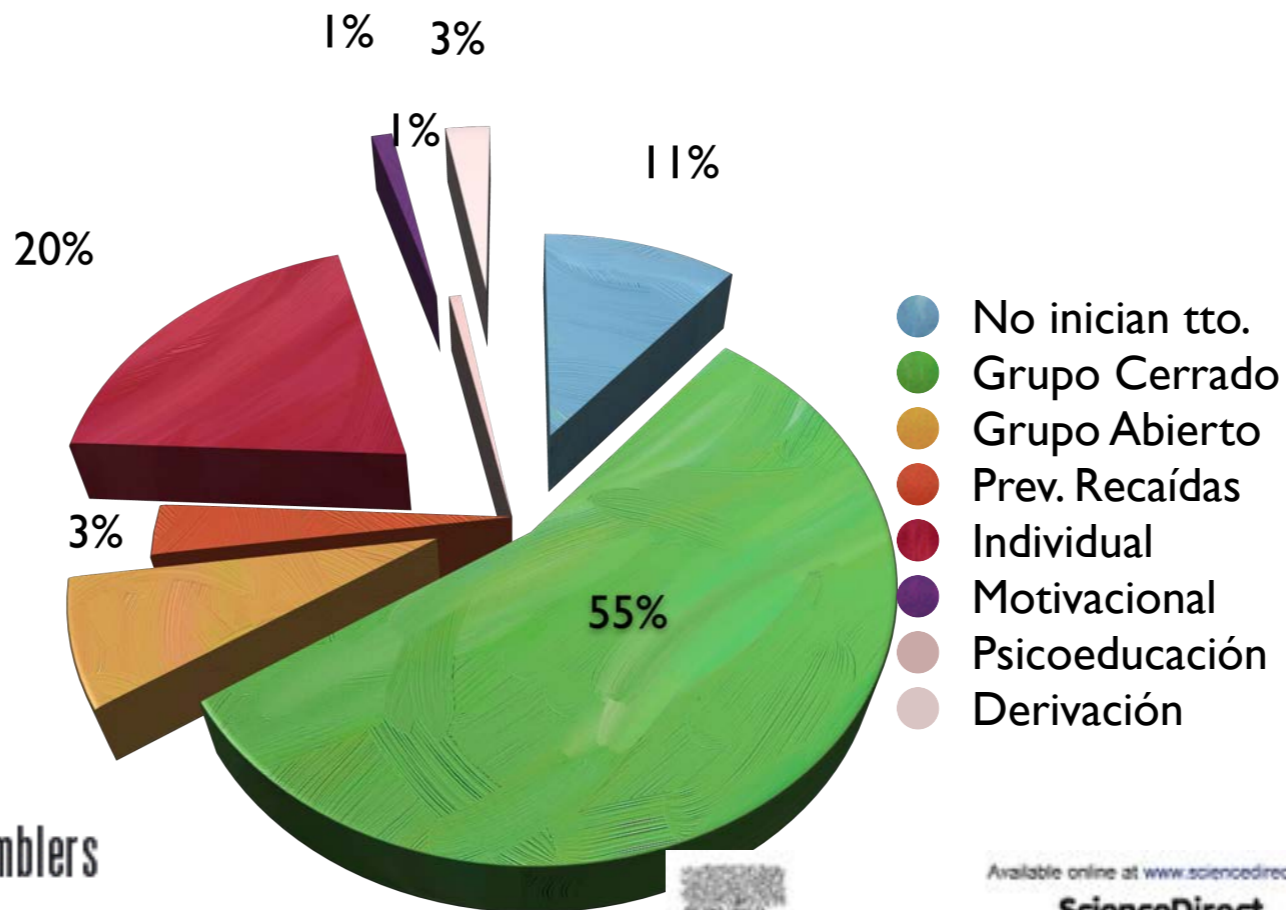
Estadística general (N=2.475)

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Motivation to change and pathological gambling: Analysis of the relationship with clinical and psychopathological variables

Mónica Gómez-Peña^{1,2}, Eva Penelo³, Roser Granero³, Fernando Fernández-Aranda^{1,4}, Eva Álvarez-Moya⁴, Juan José Santamaría¹, Laura Moragas¹, Maria-Neus Aymami¹, Blanca Bueno¹, Katarina Gunnard¹, José M. Menchón^{1,5} and Susana Jiménez-Murcia^{1,4*}

7%



- No inician tto.
- Grupo Cerrado
- Grupo Abierto
- Prev. Recaídas
- Individual
- Motivacional
- Psicoeducación
- Derivación

Correlates of Motivation to Change in Pathological Gamblers Completing Cognitive-Behavioral Group Therapy

Mónica Gómez-Peña,¹ Eva Penelo,² Roser Granero,² Fernando Fernández-Aranda,^{1,3} Eva Álvarez-Moya,¹ Juan José Santamaría,¹ Laura Moragas,¹ Maria Neus Aymami,¹ Katarina Gunnard,¹ José M. Menchón,^{1,4} and Susana Jimenez-Murcia^{1,3}

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ORIGINAL PAPER

Is Pathological Gambling Moderated by Age?

Roser Granero · Eva Penelo · Randy Stinchfield · Fernando Fernandez-Aranda · Lamprini G. Savvidou · Frida Fröberg · Neus Aymami · Mónica Gómez-Peña · Miriam Pérez-Serrano · Amparo del Pino-Gutiérrez · José M. Menchón · Susana Jiménez-Murcia



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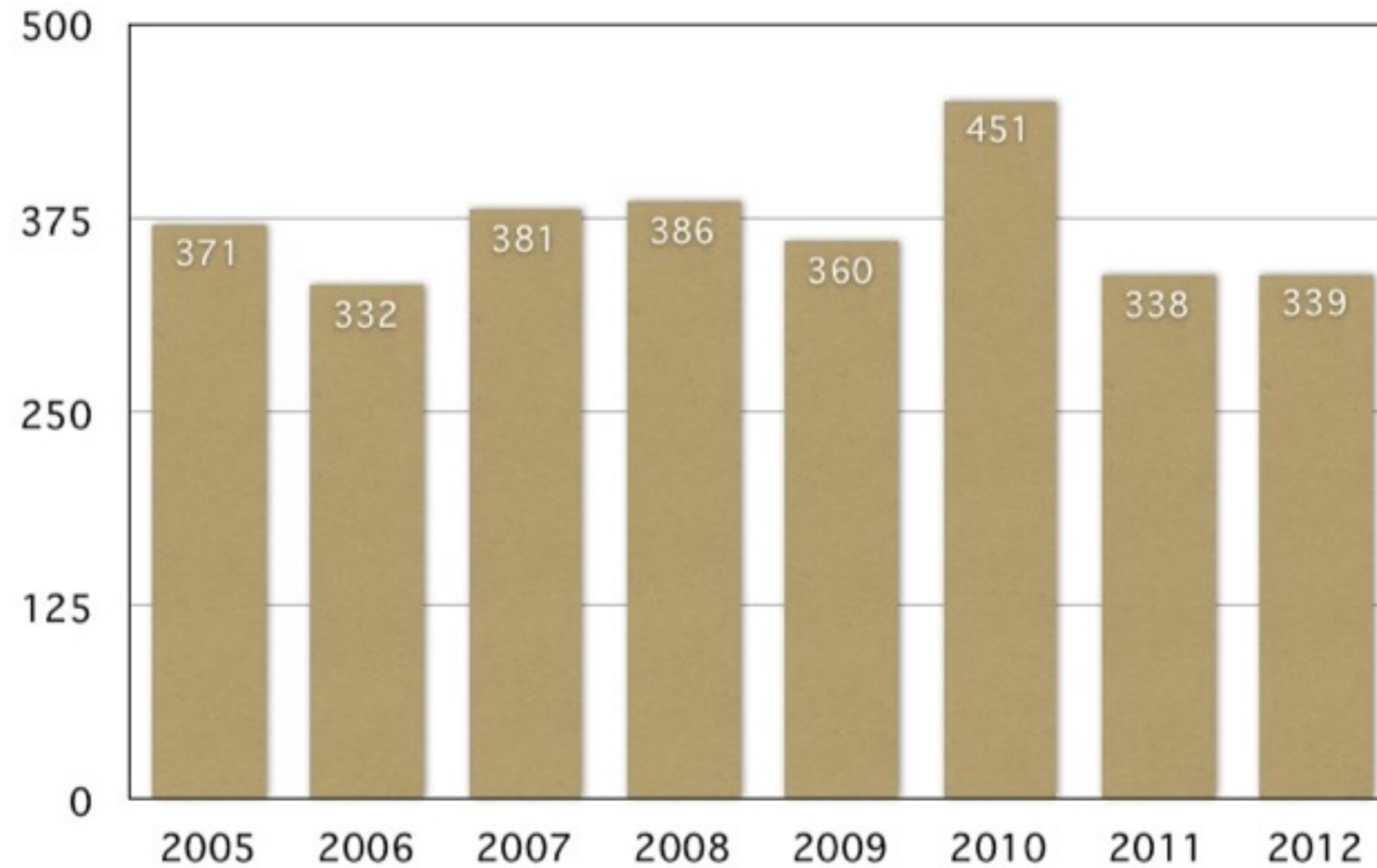
COMPREHENSIVE PSYCHIATRY

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Typologies of young pathological gamblers based on sociodemographic and clinical characteristics

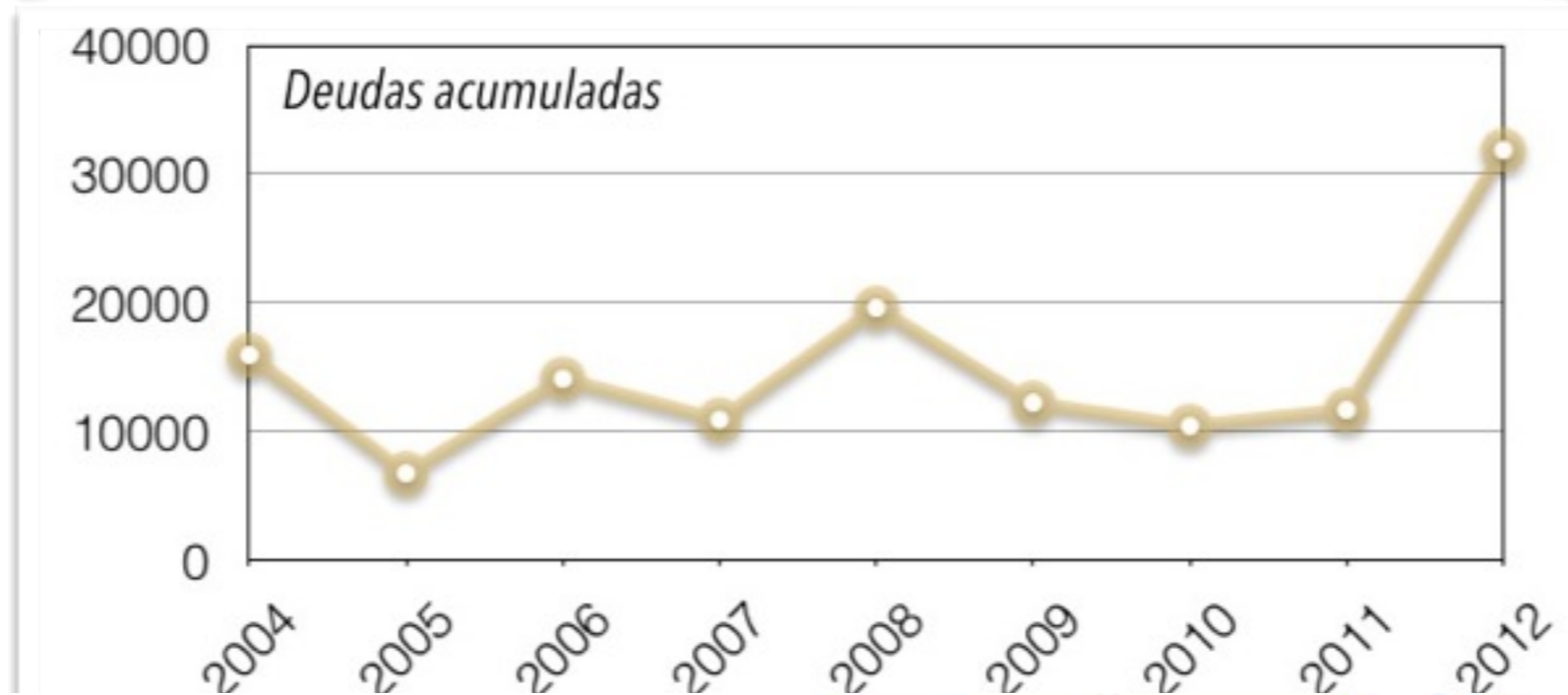
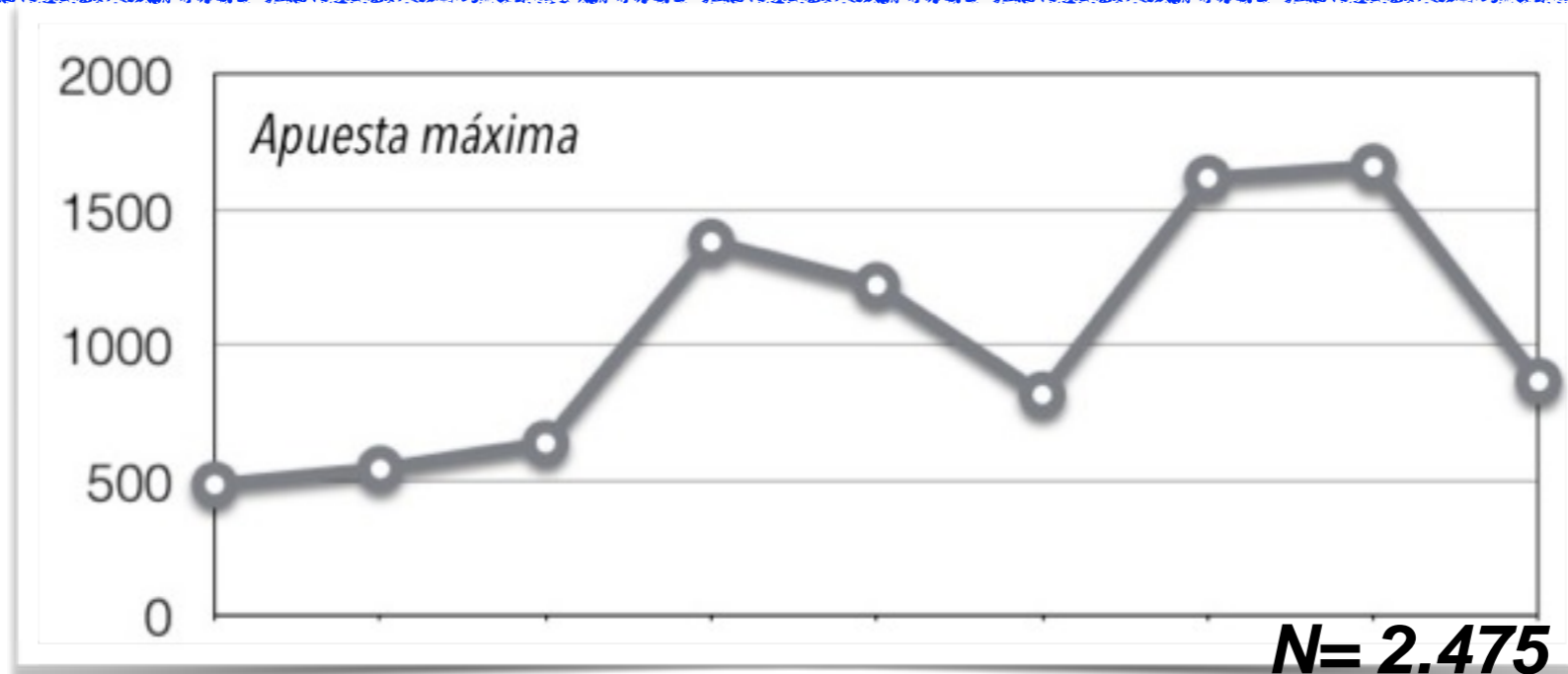
Susana Jiménez-Murcia^{a,b,c,*}, Roser Granero^{b,d}, Randy Stinchfield^e, Fernando Fernández-Aranda^{a,b,c}, Eva Penelo^d, Lamprini G. Savvidou^a, Frida Fröberg^f, Neus Aymami^a, Mónica Gómez-Peña^a, Laura Moragas^a, Amparo del Pino-Gutiérrez^{a,*}, Ana B. Fagundo^{a,b}, José M. Menchón^{a,c,h}

Nuevos casos de Juego Patológico/año (2005-2012)



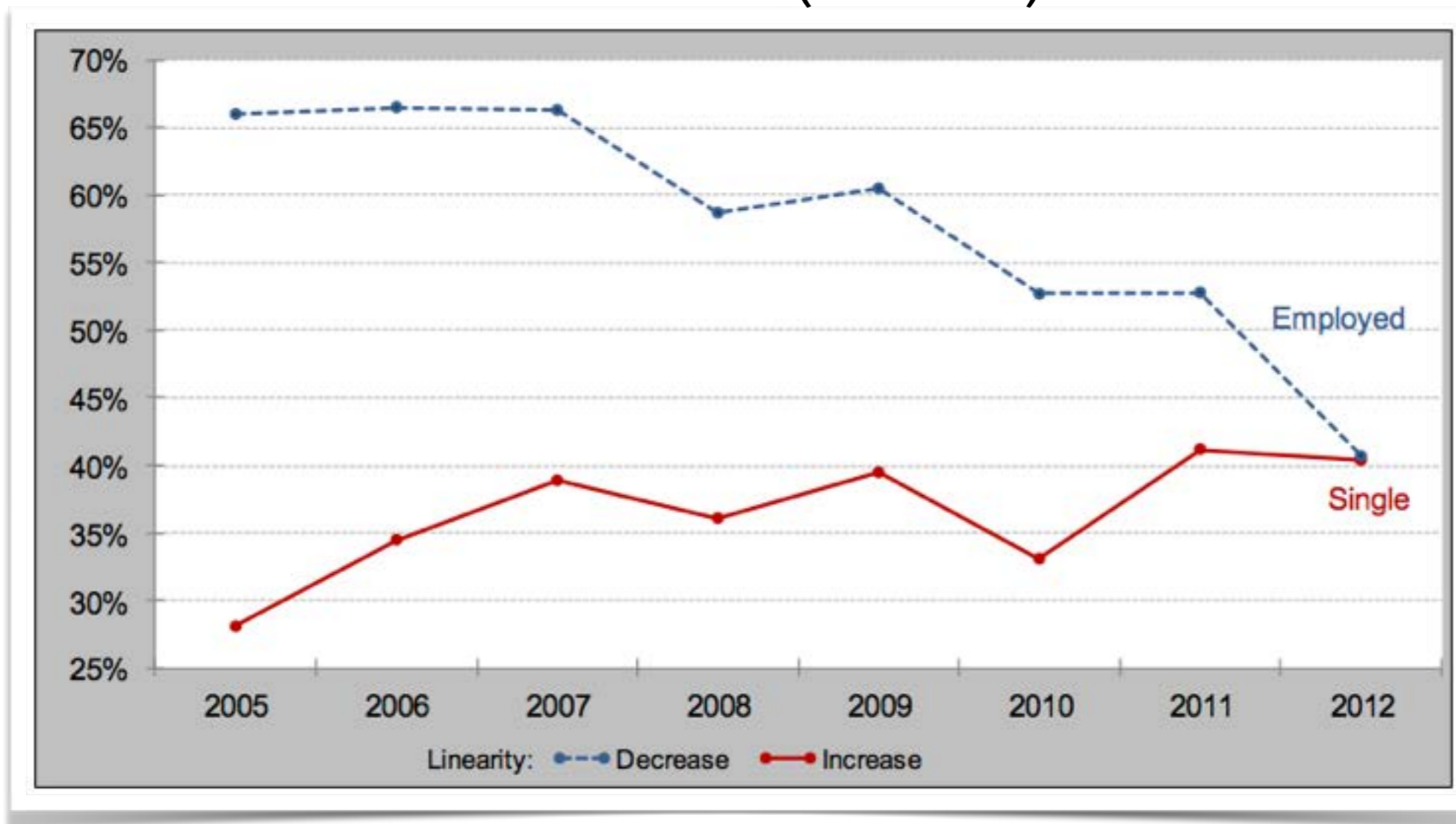
Características clínicas

Euros (€)



Epidemiología

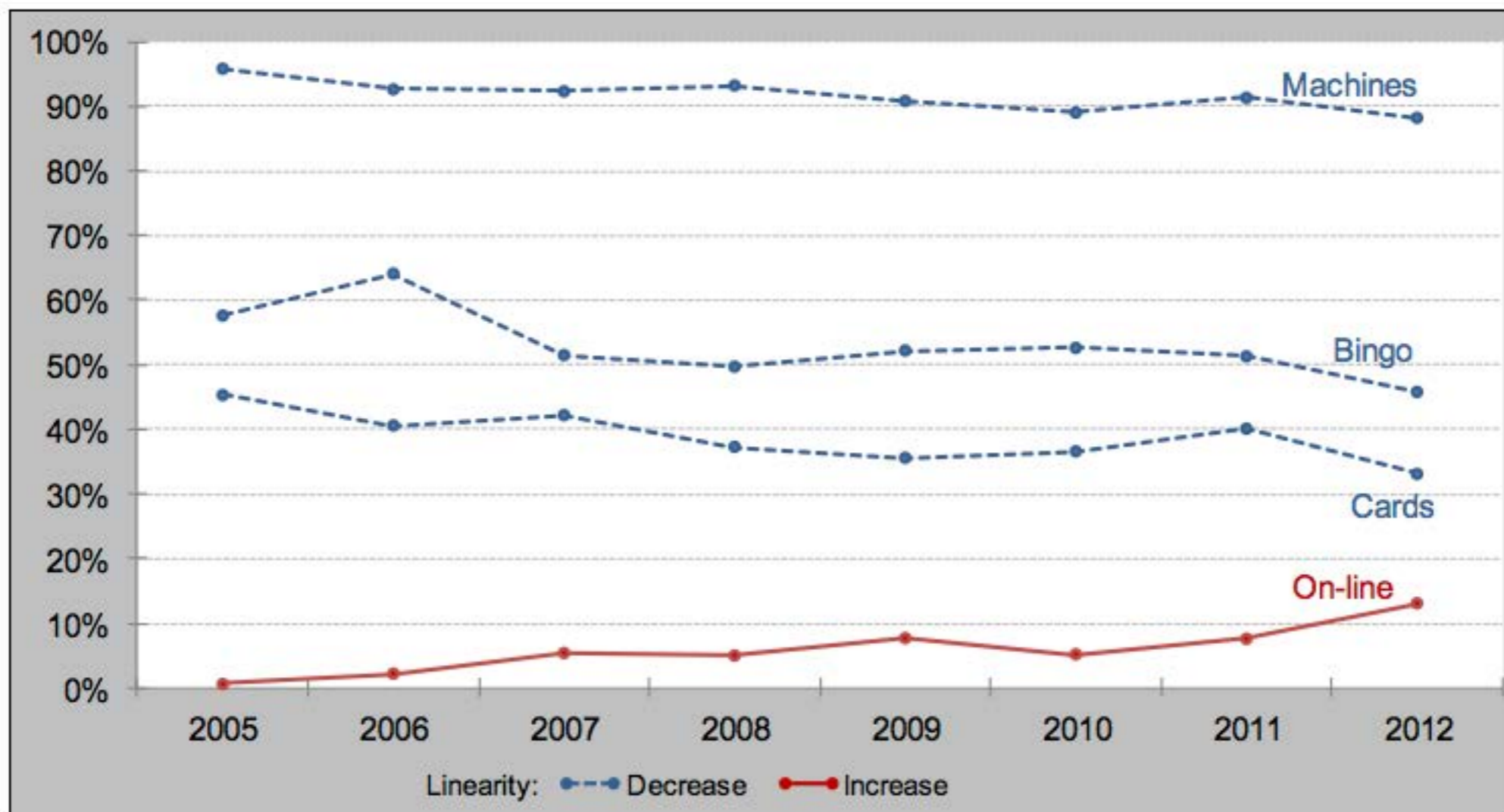
Evolución características sociodemográficas desde 2005 hasta 2012 (N=2.475)



Jiménez-Murcia S, Fernández-Aranda F, Granero R, Menchón JM. (2014). Gambling in Spain: update on experience, research and policy. *Addiction*, 109(10):1595-601.

Epidemiología

Evolución características clínicas respecto al tipo de JP desde 2005 hasta 2012 (N=2.475)



Jiménez-Murcia S, Fernández-Aranda F, Granero R, Menchón JM. (2014). Gambling in Spain: update on experience, research and policy. *Addiction*, 109(10):1595-601.

Juego presencial versus Juego online

- La literatura sobre JP informa que no todos los juegos son adictivos en el mismo grado, siendo las máquinas las que ocupan el primer lugar (Griffiths, 1999; Breen & Zimmerman, 2002).
 - **Características situacionales:** suele ser el juego con mayor accesibilidad.
 - **Características estructurales i tecnológiques:** el intervalo de tiempo entre la jugada y el resultados de la apuesta es muy breve, frecuencia de apuestas elevadas, falsa percepción de control "near miss".

Juego presencial versus online

- Entre el 1.4% y el 1.9% de la población adulta en España presenta problemas de adicción al juego (Becoña, 2009).
- En la UE, estas tasas oscilan entre el 0.3% y el 3.1% (Griffiths et al., 2009).
- Algunos estudios, apuntan tasas más elevadas de juego problemático y patológico en el juego online, que podrían ascender hasta el 13% (Wood & Williams, 2011).

Juego presencial versus online

- Paciente con juego presencial:
 - Raul, varón de 28 años de edad, con estudios primarios, trabajador de la construcción, actualmente en paro. Convive con pareja y sin hijos.
 - Inició la conducta de juego de las máquinas a los 16 años de edad, con compañeros del trabajo. Rápidamente, se convirtió en un problema. Inicialmente, jugaba con la idea de escapar del aburrimiento y ganar dinero, pero al empezar a perder, el recuperar se convirtió en su objetivo. Sin embargo, admitía que también jugaba para escapar de sus problemas, que no sabía cómo afrontar.

Juego presencial versus online

- Perfil de paciente de juego online que acude a consulta profesional:
 - Varón
 - Media de edad sobre los 35 años
 - Casado
 - Activo laboralmente
 - Estudios universitarios
 - Media de evolución del Trastorno de Juego 2años
 - Máxima apuesta por episodio 2.500, promedio de 350 euros
 - Deudas acumuladas de 20.000 euros

Juego presencial versus online

- Características del juego online que lo convierten en potencialmente más adictivo:
 - Accesibilidad 24 horas al día
 - Reducidas tasas de Internet
 - Anonimato
 - Disminución percepción de riesgo
 - Posibilidad escapar estados emocionales negativos

Juego presencial versus online

- Características del juego online que lo convierten en potencialmente más adictivo:
 - Fácil desconexión del entorno
 - Desinhibición
 - Rapidez entre apuesta y resultado
 - Posibilidad de interacción con otros jugadores
 - Simulación

Juego presencial versus online

- Tipo de juego online problemático:
 - Apuestas deportivas
 - Poker online
 - Casinos online
- Perfil emocional y de personalidad similar, caracterizado por búsqueda de sensaciones y novedad, impulsividad, baja tolerancia al aburrimiento y a la monotonía, dificultad para afrontar situaciones problemáticas, individualismo y reserva.

Juego presencial versus online

- Paciente con juego online:
 - Pere, varón de 33 años de edad, con estudios universitarios, trabaja como economista en una multinacional. Separado y sin hijos.
 - Inició a los 25 años de edad, conducta de juego online (apuestas deportivas). Pensaba que con sus conocimientos sobre estadística y su afición por el deporte le ayudarían a ganar dinero.
 - Los primeros meses, le fue realmente bien, llegando a pensar que incluso podía dedicarse de manera "semi-profesional".
 - En cuanto empezaron las primeras pérdidas, perdió el control de su conducta, dedicando mucho tiempo a esta actividad. Acumuló deudas importantes y se llegó a separar por este motivo.

Estudio 1

International Gambling Studies
Vol. 11, No. 3, December 2011, 325–337

 Routledge
Taylor & Francis Group

Are online pathological gamblers different from non-online pathological gamblers on demographics, gambling problem severity, psychopathology and personality characteristics?

Susana Jiménez-Murcia^{a,b*}, Randy Stinchfield^{c*}, Fernando Fernández-Aranda^{a,b},
Juan José Santamaría^a, Eva Penelo^d, Roser Granero^d, Mónica Gómez-Peña^a,
Neus Aymamí^a, Laura Moragas^a, Antonio Soto^a and José M. Menchón^{a,e}

Goals

Given the current limited information in the literature of studies conducted with clinical samples, the goal of the present study was:

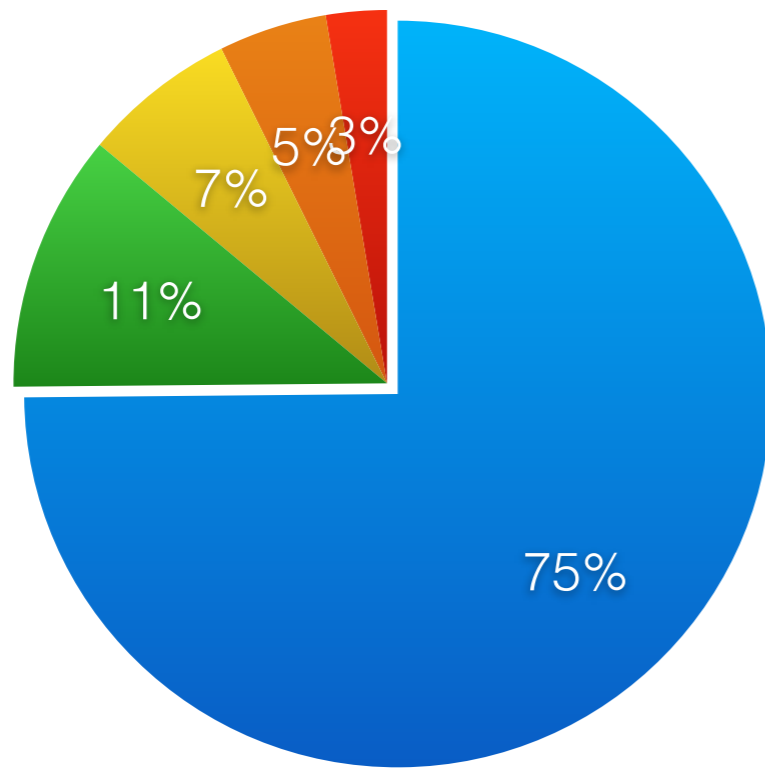
- to explore this topic by recruiting a large sample of pathological gamblers from a clinical setting and to compare OPGs to non-OPGs across a broad range of socio-demographic factors, gambling behaviour, gambling problem severity, psychopathology and personality measures.

Method

- The study was conducted between January 2005 and January 2009
- The initial sample included 1025 PG (962 non-OPGs and 53 OPGs)- 5,2%
- The patients were consecutive referrals for assessment and outpatient treatment.

Method

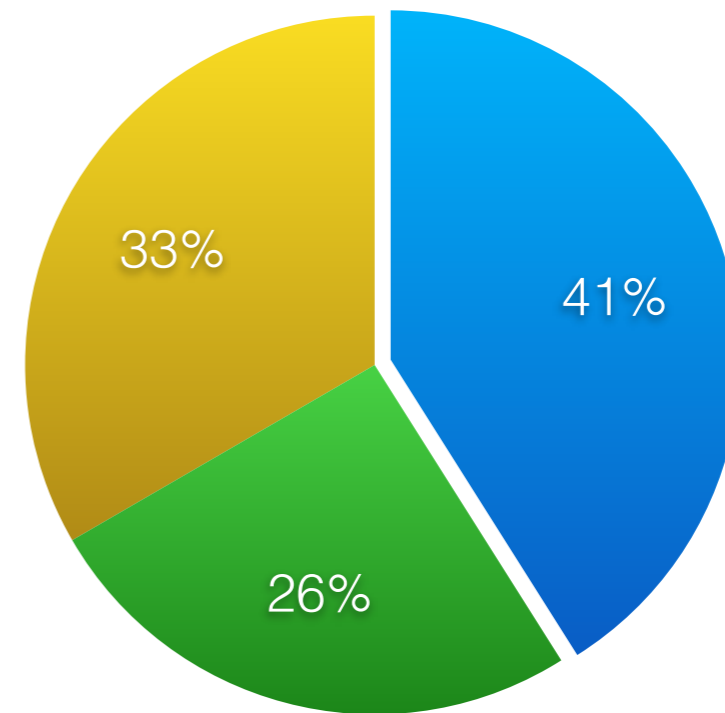
Non-OPG



● Slot M ● Bingo ● Lottery ● Casino ● Cards

OPG

● Sports ● Casino ● Poker



Assessment

- South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987)
- Stinchfield's diagnostic questionnaire for PG according to DSM-IV criteria (Stinchfield, 2003; Jiménez-Murcia, Stinchfield, et al., 2009)
- Temperament and Character Inventory-Revised (TCI-R) (Cloninger, 1999)
- Symptom Check List-90 Items-Revised (SCL-90-R) (Derogatis, 2002)
- Additional demographic, clinical and social/family variables related to gambling were measured using a semi-structured face-to-face clinical interview (Jiménez-Murcia et al., 2007).

Sociodemographic data of the non-online pathological gambling (non-OPG) and the online pathological gambling (OPG) groups.

| Socio-demographic variables | Non-OPG (n = 962) | OPG (n = 53) | Comparison | |
|-----------------------------|----------------------|-------------------|------------|-------------|
| | Mean (SD) | Mean (SD) | t-test | p-value |
| Age (yrs) | 40.4 (12.2) | 40.4 (13.1) | -0.03 | .978 |
| Personal income (eur/month) | 1,278.4 (674.0) | 1,426.1 (746.2) | -1.48 | .138 |
| Family income (eur/month) | 2,194.3 (1,106.2) | 2,435.9 (1,078.1) | -1.31 | .190 |
| Categorical variables: % | % | % | χ^2 | p-value |
| Gender: males | 91.8 | 94.3 | 0.44 | .794 |
| Employed | 69.9 | 66.0 | 0.34 | .543 |
| Educational level | 4.0 | 13.2 | 16.26 | .001 |
| <i>University</i> | | | | |
| <i>Secondary</i> | 40.7 | 52.8 | | |
| <i>Primary or less</i> | 55.3 | 34.0 | | |
| Marital status | 13.9 | 7.7 | 4.54 | .102 |
| <i>Divorced</i> | | | | |
| <i>Married</i> | 53.9 | 46.2 | | |
| <i>Single-widow</i> | 32.2 | 46.2 | | |
| Socio-economic status | 1.5 | 0 | 14.70 | .004 |
| <i>High</i> | | | | |
| <i>Medium-high</i> | 5.2 | 21.1 | | |
| <i>Medium</i> | 15.1 | 23.7 | | |
| <i>Medium-low</i> | 46.9 | 34.2 | | |
| <i>Low</i> | 31.4 | 21.1 | | |

Note: Bold: significant differences (.05 level).

Comparison of psychopathological and personality profiles between non-online pathological gambling (non-OPG) and online gambling (OPG).

| Psychopathological and personality variables | Non-OPG (<i>n</i> = 962) | OPG (<i>n</i> = 53) | Comparison | |
|--|------------------------------|-------------------------|------------|-----------------|
| | Mean (SD) | Mean (SD) | t-test | <i>p</i> -value |
| SCL: Somatization | 0.92 (0.80) | 0.89 (0.85) | 0.23 | .815 |
| SCL: Obsess.- comp. | 1.08 (0.79) | 1.08 (0.69) | 0.02 | .981 |
| SCL: Interp. sensitivity | 0.96 (0.79) | 1.06 (0.88) | -0.94 | .349 |
| SCL: Depressive | 1.38 (0.89) | 1.47 (0.93) | -0.66 | .510 |
| SCL: Anxiety | 0.94 (0.78) | 1.07 (0.94) | -1.19 | .235 |
| SCL: Hostility | 0.84 (0.80) | 0.91 (0.91) | -0.57 | .572 |
| SCL: Phobic anxiety | 0.45 (0.63) | 0.49 (0.63) | -0.45 | .655 |
| SCL: Paranoid ideation | 0.83 (0.74) | 0.89 (0.83) | -0.55 | .579 |
| SCL: Psychotic | 0.83 (0.72) | 0.92 (0.77) | -0.78 | .436 |
| SCL: GSI | 0.98 (0.68) | 1.05 (0.71) | -0.74 | .460 |
| SCL: PSDI | 1.84 (0.58) | 1.93 (0.67) | -1.14 | .254 |
| SCL: PST | 44.6 (21.9) | 46.87 (21.26) | -0.74 | .458 |
| TCI: Novelty seeking | 109.4 (14.9) | 107.5 (13.9) | 0.86 | .388 |
| TCI: Harm avoidance | 100.5 (17.5) | 100.4 (17.9) | 0.05 | .962 |
| TCI: Reward dependence | 100.7 (15.7) | 100.55 (14.37) | 0.07 | .943 |
| TCI: Persistence | 110.8 (20.7) | 113.4 (21.0) | -0.86 | .387 |
| TCI: Self-directedness | 127.2 (21.2) | 125.3 (22.9) | 0.61 | .540 |
| TCI: Cooperativeness | 133.1 (17.8) | 131.5 (17.5) | 0.64 | .520 |
| TCI: Self-transcendence | 65.7 (15.4) | 67.5 (17.3) | -0.79 | .432 |

Comparison of clinical and gambling measures between non-online pathological gambling (non-OPG) and online gambling (OPG).

| Clinical gambling variables | Non-OPG (<i>n</i> = 962) Mean (SD) | OPG (<i>n</i> = 53) Mean (SD) | Comparison | |
|--|--|--|------------|-----------------|
| | | | t-test | <i>p</i> -value |
| Age of onset of PG (yrs) | 34.6 (11.8) | 34.4 (11.7) | 0.11 | .911 |
| Duration of PG (yrs) | 5.6 (5.4) | 5.0 (7.2) | 0.69 | .490 |
| Duration of gambling behaviour (months) | 14.2 (8.4) | 14.9 (14.0) | -0.36 | .720 |
| SOGS: total score | 10.31 (3.16) | 11.08 (2.91) | -1.70 | .089 |
| DSM-IV: total score | 7.02 (2.02) | 7.15 (2.23) | -0.46 | .643 |
| Maximum euros spent Median (<i>IQR</i>) | 784.9 (2,045.7) 400.0 (200.0; 700.0) | 2,578.4 (3,793.9) 1,000.0 (500.0; 2,650.0) | -3.11 | .003 |
| Average euros spent Median (<i>IQR</i>) | 145.2 (315.3) 70.0 (30.0; 150.0) | 340.9 (534.1) 180.0 (50.0; 500.0) | -2.15 | .039 |
| Debt in euros Median (<i>IQR</i>) | 9,806.8 (26,655.9) 1,400.0 (0.0; 8,000.0) | 21,510.9 (39,124.7) 7,000.0 (500.0; 20,000.0) | -2.10 | .042 |

Note: IQR = interquartile range (percentiles 25–75). Bold = significant differences (.05 level).

Conclusions

- Although clinical research into online gambling is relatively limited, our results are in concordance with a variety of studies that suggested few differences between non-online gamblers and online gamblers.
- According to our findings, clinical, psychopathological and personality profiles did not differentiate OPG and non-OPGs.
- Educational level and related socio-economic status, along with larger amounts of money spent gambling and related larger debt, were the only variables that differentiated OPGs from non-OPGs.

Juego presencial versus online

- Paciente con Juego presencial, juego online y adicción a los videojuegos:
 - Carlos, varón de 26 años de edad, con estudios primarios, actualmente en paro. Después de separarse, ha vuelto a vivir con sus padres.
 - Inició juego en las máquinas a los 15 años de edad. Estuvo jugando de forma problemática desde los 18 hasta los 23, momento en que descubrió el poker online. Múltiples deudas por tarjetas de crédito y mini-préstamos que conseguía a través de Internet. No le pedían ninguna garantía de pago, ni avales, ni comprobaban su situación laboral y financiera.
 - Desde los 7 años jugaba a videojuegos. La familia considera que de forma problemática desde los 15. Ahora los utiliza como forma de escape y huída de la realidad.

Gambling Disorder and Video game Addiction



+



Estudio 2

Research Article

Video Game Addiction in Gambling Disorder: Clinical, Psychopathological, and Personality Correlates

**Susana Jiménez-Murcia,^{1,2,3} Fernando Fernández-Aranda,^{1,2,3}
Roser Granero,^{2,4} Mariano Chóliz,⁵ Melania La Verde,⁶ Eugenio Aguglia,⁶
Maria S. Signorelli,⁶ Gustavo M. Sá,⁷ Neus Aymamí,¹ Mónica Gómez-Peña,¹
Amparo del Pino-Gutiérrez,^{1,8} Laura Moragas,¹ Ana B. Fagundo,^{1,2} Sarah Sauchelli,¹
José A. Fernández-Formoso,⁹ and José M. Menchón^{1,3,10}**

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Goals

Given the current lack of studies in clinical samples, especially in adult populations, the present study had three main goals:

- (1) to assess the current presence of video game addiction (VGA) symptoms in GD,
- (2) to establish whether the presence of VGA symptoms is associated with greater severity of GD symptomatology and general psychopathology.
- (3) to assess whether the presence of more VGA symptoms is associated with specific temperament and character personality traits in GD patients.

Method

- A total of 193 treatment-seeking GD patients participated in the current study (167 males and 26 females)
- Consecutive referrals for assessment, and out-patient treatment at the Pathological Gambling Unit of the Psychiatric Department at the University Hospital of Bellvitge, Barcelona, Spain, 2013.
- All patients were diagnosed according to DSM-IV criteria using Stinchfield's diagnostic questionnaire for pathological gambling

Method

According to the video game dependency test (VDT), GD patients were assigned post hoc to three groups:

- 121 (62.7%) with total VDT scores of 0 to the non-video game user group (non-VGU),
- 43 (22.3%) with total VDT scores between 1 and 19 to the video game user group (VGU)
- 29 (15%) with total VDT scores 20 or more to the video game addict group (VGA). All were Internet gaming players.

Assessment

- South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987)
- Stinchfield's diagnostic questionnaire for PG according to DSM-IV criteria (Stinchfield, 2003; Jiménez-Murcia, Stinchfield, et al., 2009)
- Temperament and Character Inventory-Revised (TCI-R) (Cloninger, 1999)
- Symptom Check List-90 Items-Revised (SCL-90-R) (Derogatis, 2002)
- Spanish-language scale entitled Video game dependency test (*Test de Dependencia de Videojuegos—VDT*)

Sociodemographic and clinical characteristics of the GD sample ($N = 193$) and comparisons between groups

| | Total $n = 193$ | ¹ Non-VGU $n = 121$ | ¹ VGU $n = 43$ | ¹ VGA $n = 29$ | <i>P</i> |
|-------------------------------------|--------------------|-----------------------------------|------------------------------|------------------------------|----------|
| Gender; n (%) | | | | | |
| Males | 167 (86.5%) | 103 (85.1%) | 39 (90.7%) | 25 (86.2%) | 0.654 |
| Females | 26 (13.5%) | 18 (14.9%) | 4 (9.3%) | 4 (13.8%) | |
| Age (years); mean (SD) | 42.4 (13.4) | 45.2 (13.6) | 37.3 (12.0) | 38.6 (11.1) | 0.001 |
| Employed; n (%) | 99 (51.3%) | 61 (50.4%) | 23 (53.5%) | 15 (51.7%) | 0.941 |
| Marital status: single; n (%) | 64 (33.2%) | 37 (30.6%) | 16 (37.2%) | 11 (37.9%) | 0.613 |
| Smoker; n (%) | 109 (56.5%) | 66 (54.5%) | 23 (53.5%) | 20 (69.0%) | 0.336 |
| Use of alcohol; n (%) | 35 (18.1%) | 20 (16.5%) | 7 (16.3%) | 8 (27.6%) | 0.358 |
| Use of substances; n (%) | 14 (7.3%) | 10 (8.3%) | 3 (7.0%) | 1 (3.4%) | 0.666 |
| Age of onset PG problems; mean (SD) | 15.7 (10.8) | 17.2 (11.5) | 11.7 (9.0) | 15.4 (9.2) | 0.024 |
| Duration of PG; mean (SD) | 5.94 (7.0) | 5.87 (6.8) | 5.03 (7.5) | 7.58 (7.0) | 0.370 |
| Main gambling; n (%) | | | | | |
| Slot machines | 123 (63.7%) | 77 (63.6%) | 26 (60.5%) | 20 (69.0%) | 0.762 |
| Bingo | 12 (6.2%) | 11 (9.1%) | 1 (2.3%) | 0 (0%) | |
| Lotteries | 13 (6.7%) | 11 (9.1%) | 1 (2.3%) | 1 (3.4%) | |
| Casino | 8 (4.1%) | 5 (4.1%) | 3 (7.0%) | 0 (0%) | |
| Other | 37 (19.2%) | 17 (14.0%) | 12 (27.9%) | 8 (27.6%) | |

SD: standard deviation. ¹Non-VGU (non-video game users) (total VDT score of 0); VGU: video game users (total VDT score between 1 and 19); VGA: video game addicts (total VDT score of 20 or higher). Chi-square test for categorical outcomes and ANOVA for quantitative outcomes.

Comparison of psychopathological and personality profiles between Non-VGU, VGU and VGA

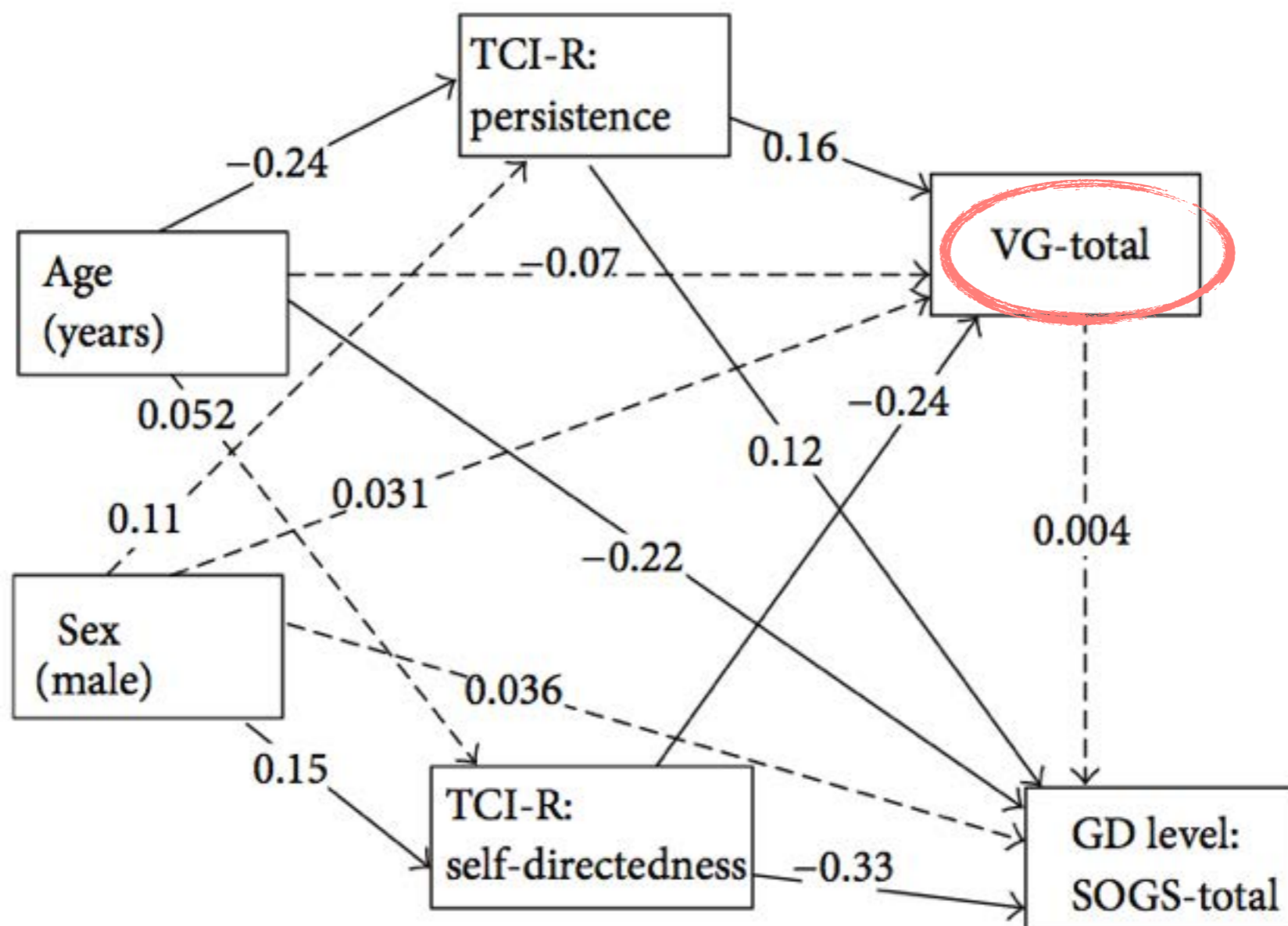
| | ¹ Non-VGU | | ¹ VGU | | ¹ VGA | | Group <i>P</i> | ANOVA | | Effect size | | |
|-----------------------------------|----------------------|-------|------------------|-------|------------------|-------|-------------------|------------------|------------------|---------------------------------|--------------|--------------|
| | <i>n</i> = 121 | | <i>n</i> = 43 | | <i>n</i> = 29 | | | Trends | | ² Cohen's <i> d </i> | | |
| | Mean | SD | Mean | SD | Mean | SD | | LT | QT | | | |
| SCL-90: somatization | 1.13 | 0.87 | 0.95 | 0.91 | 1.69 | 1.09 | 0.003 | 0.030 | 0.008 | 0.20 | 0.57* | 0.74* |
| SCL-90: obsessive/compulsive | 1.20 | 0.88 | 1.12 | 0.78 | 1.96 | 0.93 | <0.001 | 0.001 | 0.005 | 0.10 | 0.84* | 0.98* |
| SCL-90: interpersonal sensitivity | 1.18 | 0.94 | 1.05 | 0.87 | 1.89 | 0.94 | <0.001 | 0.004 | 0.006 | 0.14 | 0.76* | 0.93* |
| SCL-90: depression | 1.66 | 0.96 | 1.56 | 0.92 | 2.21 | 0.93 | 0.010 | 0.026 | 0.036 | 0.11 | 0.58* | 0.70* |
| SCL-90: anxiety | 1.15 | 0.86 | 1.03 | 0.83 | 1.74 | 0.97 | 0.002 | 0.011 | 0.013 | 0.14 | 0.64* | 0.79* |
| SCL-90: hostility | 1.00 | 0.88 | 0.80 | 0.76 | 1.67 | 1.08 | <0.001 | 0.007 | 0.002 | 0.24 | 0.68* | 0.93* |
| SCL-90: phobic anxiety | 0.53 | 0.70 | 0.43 | 0.76 | 0.99 | 0.96 | 0.007 | 0.027 | 0.023 | 0.14 | 0.55* | 0.65* |
| SCL-90: paranoia | 1.02 | 0.84 | 0.98 | 0.78 | 1.77 | 0.96 | <0.001 | <0.001 | 0.010 | 0.05 | 0.83* | 0.90* |
| SCL-90: psychoticism | 1.06 | 0.80 | 0.89 | 0.75 | 1.58 | 1.03 | 0.002 | 0.027 | 0.007 | 0.22 | 0.56* | 0.77* |
| SCL-90: GSI score | 1.18 | 0.76 | 1.06 | 0.72 | 1.79 | 0.81 | <0.001 | 0.004 | 0.003 | 0.16 | 0.75* | 0.91* |
| SCL-90: PST score | 49.43 | 21.25 | 48.90 | 21.45 | 65.07 | 18.88 | <0.001 | 0.002 | 0.035 | 0.02 | 0.78* | 0.80* |
| SCL-90: PSDI score | 1.99 | 0.64 | 1.80 | 0.56 | 2.34 | 0.64 | 0.002 | 0.007 | 0.002 | 0.32 | 0.55* | 0.90* |
| TCI-R: novelty seeking | 108.36 | 12.21 | 108.51 | 12.92 | 110.22 | 12.39 | 0.778 | 0.529 | 0.744 | 0.01 | 0.15 | 0.14 |
| TCI-R: harm avoidance | 104.03 | 15.93 | 98.90 | 20.80 | 106.52 | 16.46 | 0.157 | 0.996 | 0.054 | 0.28 | 0.15 | 0.41 |
| TCI-R: reward dependence | 98.92 | 13.70 | 101.62 | 10.23 | 98.11 | 13.97 | 0.466 | 0.883 | 0.220 | 0.22 | 0.06 | 0.29 |
| TCI-R: persistence | 103.54 | 23.10 | 114.79 | 21.65 | 112.89 | 23.15 | 0.012 | 0.010 | 0.135 | 0.50* | 0.40 | 0.08 |
| TCI-R: self-directedness | 131.27 | 20.93 | 132.77 | 21.02 | 117.56 | 18.56 | 0.005 | 0.012 | 0.037 | 0.07 | 0.69* | 0.77* |
| TCI-R: cooperativeness | 132.95 | 16.40 | 132.69 | 15.48 | 125.78 | 15.23 | 0.107 | 0.068 | 0.282 | 0.02 | 0.45 | 0.45 |
| TCI-R: self-transcendence | 62.79 | 15.35 | 60.69 | 12.82 | 66.89 | 17.14 | 0.261 | 0.410 | 0.156 | 0.15 | 0.25 | 0.41 |
| VG: total score | 0.00 | 0.00 | 6.77 | 4.60 | 44.24 | 21.60 | <0.001 | <0.001 | <0.001 | 2.08* | 2.77* | 2.30* |

SD: standard deviation. LT: linear trend; QT: quadratic trend.

¹Non-VGU (non-video game users) (total VDT score of 0); VGU: video game users (total VDT score between 1 and 19); VGA: video game addicts (total VDT score of 20 or higher).

²Cohen's *|d|* for the comparisons: non-VGU versus VGU; non-VGU versus VGA; VGU versus VGA. *Bold: moderate (*|d|* > 0.50) to high (*|d|* > 0.80) effect size.

Structural equation model (SEM) valuing the pathways for the video game (VG) and the gambling disorder (GD) levels.



Conclusions

- The main finding of the study was that the prevalence of VGA in a consecutive clinical sample of treatment- seeking GD individuals was 15%.
- The second main finding was that both VGU and VGA patients presented higher general psychopathology.
- A third main finding was that patients who made excessive use of VG (both VGU and VGA) presented more dysfunctional personality traits, namely, lower self-directedness and higher persistence.



Gracias!!!

