
Women's anxiety about professional success: 30 years later in a Spanish context

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Abstract

Reproduces studies carried out at the beginning of the 1970s that demonstrated women's anxiety about university or professional success. This anxiety was characterised by their fear of being socially isolated. A methodology in which women are asked direct questions shows that they have overcome that anxiety. But when a more subtle type of question is used, it is revealed that women continue to attribute the best academic, professional and social results to men instead of women.

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Presentation

This study attempts to reproduce several studies carried out 30 years ago concerning the self-concept of women at that time, especially those working at universities, with regard to their work and professional success. In order to understand the approach to these subjects it should be remembered that they were framed within the theory of necessity, motivation or achievement orientation proposed by McClelland *et al.* (1953). This is a concept which was originally meant to be applied mainly to the role of men; which manifests itself in school performance, leadership situations, interest in objects and in discoveries, and which was tested by means of the thematic apperception test (TAT), questionnaires on ambitions, expectations, or the opinion of teachers and parents.

Only later was it applied more frequently to samples of women. A review of women's achievement motivation can be found in studies by Maccoby and Jacklin (1978) and by Stein and Bailey (1976). It can be deduced from these articles that Maccoby and Jacklin (1978) show the fallacy of the following sentence taken from Hoffman (1972), which begins the article and expresses a common belief:

Little girls want to please; they work for love and approval; if bright, they underestimate their competence. Little boys show more task involvement, more confidence (Hoffman, 1972, p. 134).

In order to partially dispute this statement they review many studies on achievement motivation, interest in tasks, curiosity, and how both boys and girls are motivated when the above are highly regarded by society. The conclusion they reach states that women, like men, devote themselves to the tasks that they carry out, obtain the same or better marks or the same performance and are evaluated in the same way by their teachers. The most striking differences would be that boys are more motivated than girls when it is said that the task shows leadership capacity, competitiveness, or risk. What is most interesting, and what all the authors point out, is that both boys and girls of all ages are equally motivated by tasks that are socially rewarded.

The study by Stein and Bailey (1976) is more specific: it confines itself to achievement behaviour

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in tasks that are traditionally specific for women or for men and not only in the academic sphere. They are thus more specific studies. When the research is restricted in this way it is found that women demonstrate greater motivation in tasks considered specifically for women.

The studies reviewed in these two articles coincide in the assertion that women's work is valued less than men's, and that it is not socially acceptable for women to choose careers considered to be for men, and, above all, for women to compete with them professionally. The result of this is that women's aims and ambitions regarding their work are lower than men's and that they even go so far as to hide their academic results when these results are superior to those of a male colleague. Another interesting result, when analysed from Bandura's (1997) cognitive social theory, is that women blame their failures on themselves and attribute their successes to luck, so it is not surprising that they feel more responsible for their failures and they lower their levels of ambition in order not to fail. Hackett (1995) has demonstrated this in her studies on self-sufficiency and career choices. This general idea is included by Bandura (1997) when he states, in reference to the mechanisms of personal control, that, in relation to judgement, the type of judgement made is different according to what people attribute their behaviour to. Furthermore, in this context, he includes studies that sustain that women tend to attribute their successes to external causes and their failures to internal ones. All the authors also emphasize that this is due to the different styles of education and to the different expectations society has of men and women. Thus it is a problem of learning, not of substance.

This study attempts to replicate some of the research related to the latter point: a lower value attached to the same work when it is carried out by a woman rather than a man, and women's anxiety about professional success in tasks where they compete with men. This study has been reproduced after 30 years, which reminds us of what Ortega y Gasset (1969, p. 278) wrote:

Thirty years! A strange coincidence! The period that is usually attributed to one generation.

It is also the amount of time necessary for a new generation to be born, one that has a new vision of the world and of humanity. The objective is to analyse whether this new mentality has been internalized by young Spanish college students or whether, on the contrary, the results obtained in American colleges in the 1970s would be corroborated. It should be taken into account that at the time of this research the number of female students at Spanish universities is comparable to that of male students. In fact, the number of

women who successfully complete their studies exceeds that of men by over ten points. However, discrimination of women at the workplace has been confirmed by all the published indices: unemployment rates, job rates, salary levels, women in management, etc. This discrimination rate is even greater than that obtained not only in the USA, but also in the European Union as a whole.

In order to make the proposal of this study clear, a summary is made of two of the most-oft quoted papers on this subject: Goldberg's (1968) and Horner's (1969). One of the most classic studies illustrating how women have negative attitudes towards work carried out by women is Philip Goldberg's (Goldberg, 1968). Others that could be cited are: the study by Pheterson *et al.* (1971) in which 147 chairmen evaluate women as being worse than men when they have the same qualifications to be teachers, and an article by Durkin (1985) that shows how English women considered weather reports to be less scientific once women started to present them. Goldberg (1968) asks if women themselves are prejudiced against women. The first step he takes is to learn that university women identify law and city planning as typical professions for men, school teaching and dietetics as typical professions for women, and art history and linguistics as neutral, not strongly associated with either sex.

Once the typical professions for each sex were identified, he then tested his hypothesis that women are prejudiced against women. He chose six professional articles on these six professions, each of which was abridged to about 1,500 words. He collected them in a booklet and handed them out to college girls. The articles were the same – the only difference was that for some students the author was given as a man and for others the author was a woman: John McKay or Joan McKay, for example. The instructions given at the beginning said:

In this booklet you will find excerpts of six articles, written by six different authors in six different professional fields. At the end of each article you will find several questions . . . You are not presumed to be sophisticated or knowledgeable in all the fields. We are interested in the ability of college students to make critical evaluations . . . (Goldberg, 1968; pp. 29-30).

At the end of the article there were nine questions in which the students had to make a general evaluation of the article as regards its persuasiveness, profundity, style, and the author's professional competence, professional status, and ability to sway the reader. This they did on a scale of five points. In total, nine questions were asked about each of the six articles, so there were 54 comparisons between the authors based only on

their sex in order to see which came out better. The final results given by the author are overwhelming. Of the 54 comparisons, 44 – or 82 percent – were favourable towards male authors. Three showed equality and only seven – 12 percent – were more favorable when the author was supposedly a woman.

Other authors attempted to go a step further and discover some processes and/or psychological effects of this discrimination. One of the stands adopted at that time was that women had so assimilated this role of being “losers” that when they were successful or they were faced with the success of a woman they did not foresee any good coming from it. Horner (1969) approached this idea specifically. She attempted to demonstrate that women had to pay for professional success with the currency of anxiety. Atkinson's achievement motivations (in Horner, 1969) are exclusively masculine, so women must be motivated to avoid success. Horner (1969) applied the TAT to 90 female students and 88 male students at the University of Michigan in order to discover their achievement motivation. He then presented them with a story about which they had to write whatever occurred to them after the following clue:

After first-term finals, John (Anne) finds himself (herself) at the top of his (her) medical-school class (Horner, 1969, p.38).

The male students are given the story of John, the female students the story of Anne[1].

Matina Horner (1969) makes an analysis of the content of the stories written by the subjects. In order to test her hypothesis of women's anxiety about success, she analyses stories written by women and men. What did Anne feel, what would her future be like? Would it be the same as the story described by male students for John?

The results show that 65 percent of the girls in the study wrote stories about Anne that indicated anxiety about success in one of the following categories:

- they reflected a fear of social rejection;
- they expressed doubt about her femininity;
- they denied the reality of the story;
- Anne could not be number one in her class.

Some descriptions of Anne, as transcribed by Horner (1969, p. 38), show a state of uneasiness, pity and compassion for Anne, but also of suppressed anger:

Anne doesn't want to be number one in her class... she feels she shouldn't rank so high because of social reasons. She drops down to ninth in the class and then marries the boy who graduates number one.

Anne is an acne-faced bookworm. She runs to the bulletin board and finds she's at the top. As usual

she smarts off. A chorus of groans is the rest of the class's reply... She studies 12 hours a day, and lives at home to save money. “Well it certainly paid off. All the Friday and Saturday nights without dates, fun – I'll be the best women doctor alive.” And yet a twinge of sadness comes thru – she wonders what she really has ...

When these results on anxiety about success which appear in the girls' stories are compared with the stories written by male students in which they describe John's success, it is evident that the differences are considerable and significant. The number of boys that showed anxiety towards success was 10 percent compared to 65 percent of the girls.

The social changes that have occurred in the last three decades, especially in the job market, may have led to changes in women's motivations (Lee, 1996; Veroff *et al.*, 1980). In his *Manual of Social Psychology*, Myers (1995) directly takes up these same experiments, especially the famous one by Goldberg (1968). He reported having repeated the same experiment with his students, but that he did not obtain the same results. He then refers to a study/review of analyses on the evaluations made of the same work carried out by women and by men, and also reaches the satisfactory conclusion that there were no differences found between men and women in any of them.

However, he concludes this section of the text dedicated to prejudice against women saying that, the same as prejudice against minorities, today this prejudice is manifested in a more subtle way. This situation is illustrated, for example, by a study in which it is shown how the same car is sold for a higher price to women than to men. Also interesting is the way in which the author concludes this chapter, stating that when women are asked, they think that discrimination happens to other women, that their boss does not discriminate against them. This reminds one of studies carried out in which very old people or people with terminal diseases have a clear idea of the characteristics of age or illness, but who say it does not apply to them because “we are always in better shape than others our age or with our type of cancer” (Heckhausen, 1992).

Moreover, the dimensionality and the content of achievement motivation is currently being revised (Born and Altink, 1990; Coria, 1993; Elliot and McGregor, 2001; O'Connor, 2001; Barberá and Cantero, 1996). It seems that women are shown to have a view of achievement that differs from that of men. This is a concept that involves goals that are not only of a public and professional character, but also affective, private and strictly personal. Besides content, some authors feel that the differences between men and women transcend the type of fear linked to achievement.

Thus, Coria (1993) claims that women still suffer from anxiety when they are faced with success and public judgement, whereas men's fear is related to not being able to achieve their goals or to losing what they have already gained.

As stated above, this study attempts to confirm or refute the hypothesis of women's fear of professional success. At first, by following the guidelines of Horner's (1969) study, and then by complementing the information obtained through a strategy of graphic attribution of the results, where the subjects attribute the results (shown on a graph) to either a man or a woman. We believe this allows us to estimate the existence of anxiety towards success in a more subtle way.

Method

Participants

A total of 95 women and six men, all second-year psychology students, participated in this study. It is thus a sample with the same characteristics as those used by Goldberg (1968) and Horner (1969): students and mostly women.

Procedure

First part: day one

The aim is to validate the hypothesis presented by Horner (1969) using a similar methodology. The students are presented with a story similar to Horner's (1969), with the difference that instead of letting them write freely, they are asked direct questions on the probability of women or men going through a state of anxiety induced by success. Please see the Appendix (Figures A1 and A2) for a reproduction of the text and the questions answered by the participants.

Two versions were made of the same text, the only modification being the name of the successful person. The versions were mixed together and handed out to the students in class in such a way that the allocation of the John/Joan texts was random.

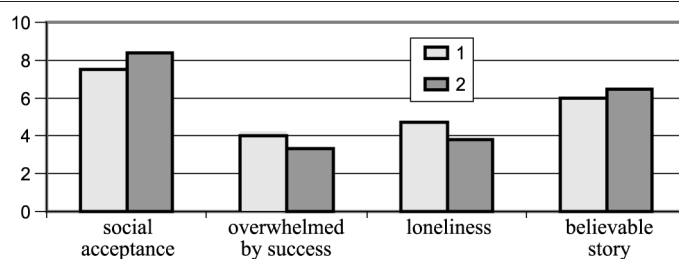
Second part: day two

The objective was to confirm the results obtained in the first part. Thus, the following day a series of tests were carried out on the same individuals who took part in the first stage of the study. There was a loss of 11 subjects – ten women and one man.

First, in order to find out whether or not the judgements made had taken into consideration the sex defined in the text, questions as displayed in the Appendix (Figure A3) were asked.

In addition, the results obtained the first day were presented graphically (Figure 1), but without identifying the sex corresponding to each column of

Figure 1 Graphical presentation of the results obtained on the first day



the histogram. They were only given the results that best showed the differences and that referred to Horner's (1969) three categories: anxiety, loneliness and credibility of the story. This type of methodology is frequently used in different fields, such as legal psychology studies (e.g. Penrod and Cutler, 1995). The format of the question was as follows:

Yesterday's answers have been analysed. Some of the most significant results are presented in the following graph and refer to: social acceptance, being overwhelmed by success, loneliness, and the credibility of the story. Do you think that the scores represented by number 1 refer to John or Joan?
[JOHN] [JOAN]

To insure that the study would be experimental, half of the subjects – selected at random – were given graphs in which the results represented by 1 were first in each column, whereas for the other half the results represented by 1 were second.

Results

First part

Analysis of the data by sex demonstrated that generally there were no significant differences between the male and female samples. Thus the sample was analysed as a whole, although it should be remembered that 94 percent of the sample were women, a fact that allows us – together with their being second-year college students – to compare our results with those of Horner (1969). Table I gives these results and the significance of the differences between the averages obtained in each question and according to whether the test read was about John or Joan. As can be seen, the only significant differences in the scores received are the questions “overwhelmed by success”, which is favourable in the judgement of John, and “loneliness” and “social acceptance”, with scores more favourable to Joan.

If these quantitative results are compared with the qualitative results obtained by Horner (1969), it would have to be said that there is no longer a noticeable level of anxiety about professional success in women. Instead, the results indicate that

Table I Differences in averages between scores attributed to men and women faced with professional success

	Sex	n	Media	D.S.	gl	t	Sig. Bilateral
Success being overwhelming	John	49	4,22	2,69	99	1,674	0.097
	Joan	52	3,33	2,69			
Number of friends	John	49	5,96	1,81	99	-2,265	0.791
	Joan	52	6,06	1,91			
Normal person	John	48	5,44	2,30	99	0,637	0.526
	Joan	52	5,13	2,45			
Loneliness	John	49	4,71	2,29	99	2,055	0.043
	Joan	52	3,81	2,14			
Happiness	John	49	6,76	1,65	99	0,432	0.667
	Joan	52	6,62	1,60			
Married	John	49	6,55	1,74	99	0,084	0.933
	Joan	52	6,52	2,04			
Believable story	John	49	6,00	1,97	99	-1,107	0.271
	Joan	52	6,48	2,36			
Social acceptance	John	49	7,49	1,43	99	-3,234	0.002
	Joan	52	8,38	1,35			

the tendency is becoming reversed: successful women show some differences which are favourable to them, and these differences are significant when they refer to social acceptance. Professionally successful women expect greater social acceptance than successful men, and the same is true with loneliness – they expect to feel less lonely.

Second part

Confirmation of the above results depends on knowing the true impact that the sex of the story's main character has on the judgements made. Data analysis of this new stage of the research shows that 37.08 percent of the participants did not think about whether the person was a man or woman. χ^2 is 36.138, gl. 2 and the bilateral significance = 0.000, as shown in Table II. There was also a certain amount of confusion. It can be seen that there were six individuals who said that they had read about John when they had actually read about Joan. None of those who had read about John thought that they had read about Joan.

On studying these results it would seem correct to repeat the one factor ANOVA that depends on the gender or sex that the subjects had in mind when answering. However, it should be pointed out that over one-third of the subjects did not take into account whether the central character was

Table II Number of subjects who read about John or about Joan and who said that they thought about John, Joan, or they did not think about one sex or the other

Read about	Thought about			Total
	John	Joan	Neutral	
John	29	0	16	45
Joan	6	21	17	44
Total	35	21	33	89

male or female. This indicates that the distinction between gender roles with respect to academic success is tending to disappear.

The results of this new analysis are shown in Table III. A close analysis shows that the results that are significant or that are close to statistical significance are once again favourable to women.

Attributing the graph results to a man or a woman

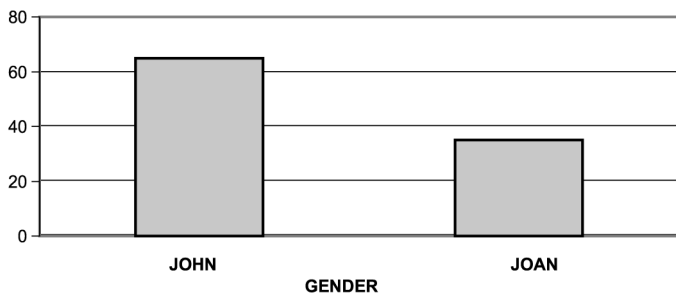
As has already been stated, the second analysis was carried out the following day, with the same subjects and during the same class period. The subjects were given the results from the first tests in the form of a graph, a graph in which one of the sexes is favoured because he/she will be better accepted by society, less overwhelmed by success, feel less lonely and his/her story will be more believable. The question asked was, "Which person has been given the better results by your classmates?" Analysis of the data provides results that are very different from those found before. The results clearly indicate that when the subjects are shown the graphs of the results they incorrectly interpret their own answers, to the extent that they attribute the more positive results to John, not to Joan ($\chi^2 = 13.153$ gl. = $1p = 0.000$). This is independent of the sex of the subject making the judgement and the order in which they are presented in the graph (1-2 or 2-1).

As the majority of the sample is female it is confirmed that in spite of the fact that they personally feel comfortable with professional success and their anxiety about success has disappeared, they still feel that the best results are associated more with men than with women. Perhaps it should be stressed that we are talking about social consequences. As can be seen in Figure 2, when the subjects are asked to judge

Table III Anxiety about professional success according to which sex they were thinking about when answering

	Thought about	n	Average	D.S.	GI	F	Sig.
Social acceptance	John	31	8.03	1.07	2	1.098	0.338
	Joan	25	8.33	1.20			
	Neutral	33	7.73	1.94			
Overwhelmed by success	John	31	4.69	2.63	2	7.733	0.001
	Joan	25	2.00	1.64			
	Neutral	33	3.88	2.75			
Number of friends	John	31	6.09	1.85	2	1.499	0.229
	Joan	25	6.57	1.72			
	Neutral	33	5.70	1.83			
Normal person	John	31	5.18	1.95	2	0.164	0.849
	Joan	25	5.24	2.57			
	Neutral	33	5.48	2.44			
Loneliness	John	31	4.46	2.08	2	0.767	0.468
	Joan	25	3.76	2.39			
	Neutral	33	4.48	2.45			
Happiness	John	31	6.80	1.57	2	2.478	0.090
	Joan	25	7.14	1.39			
	Neutral	33	6.21	1.67			
Married	John	31	6.57	1.88	2	0.867	0.424
	Joan	25	6.81	2.04			
	Neutral	33	6.15	1.77			
Believable story	John	31	5.63	2.00	2	2.585	0.081
	Joan	25	8.86	1.98			
	Neutral	33	6.33	2.06			

Figure 2 Attributing the best results: social acceptance, accepting success and the credibility of a brilliant résumé



which sex the character is, a significant number believe that this description corresponds to a man and not to a woman.

Discussion

The changes made in legislation and regulations in the last few years with respect to women and their rights are concordant with the apparent decrease in the old forms of sexism and rejection of non-traditional roles (Expósito *et al.*, 2000). However, the existence of discrimination against women in the workplace and thus the confirmation of a discrepancy between estimated attitudes and behaviour has generated a certain level of agreement on the modifications experienced by the

gender stereotype of women. Various theories, such as those developed by Tougas *et al.* (1995) or Glick and Fiske (1996), have in common the proposal of more subtle forms of prejudice. This study attempts to analyse the validity of traditional forms of sexism, such as anxiety about professional success, when women are asked questions indirectly, in such a way that they do not have to publicly demonstrate their beliefs. In this experimental study we wanted to see if the results obtained at American universities in the 1970s would be confirmed at Spanish universities today. It was of special interest to verify whether or not women still felt anxiety towards professional success when faced with the expectation of the negative social consequences caused by it. The results repeatedly show that the subjects, 94 percent of whom were women, did not demonstrate this anxiety about success when they were asked directly, as Horner (1969) did, although a bit differently. But when they were asked the same thing in the form of a graph showing these results as favourable, or at least not different from those of men, it was discovered that they think that the ones who are academically and socially successful are men, not women. Women's anxiety about professional success is thus indirectly confirmed.

It could be interpreted that the most plausible explanation is to think that when women are asked directly about their fear or anxiety about success

these feelings do not appear because women no longer experience them. On the contrary, they significantly feel that success will not overwhelm them, that they will be happier than successful men, and that the success story is as believable for them as it is for men. On the other hand, when they are asked to examine the graph of results, what they indicate is that they think that others still hold stereotypes. In other words, they believe that this stereotype still exists in society. Following this reasoning, they would have answered in the belief that the stereotype that men are more socially successful than women is still fixed in society. As stated by Stein and Bailey (1976), they would believe that their peers would have lower expectations for women according to the generalised stereotype of gender roles) that says that women are less competent than men (Stein and Bailey, 1976, p. 249). Contrary to this hypothesis, we believe that it must be taken into account that the subjects knew that the answers were given by their peers, by their classmates – mostly women – and not by an abstract society, so the idea of a meta-stereotype is not applicable here. Therefore they are the ones who, in spite of the fact that they do not demonstrate anxiety about success, believe that social success is more associated with professional men than professional women. To us it seems better to interpret these results by following the recommendations on investigating prejudice and general attitudes: when questions are asked directly prejudice does not appear, however it does when questions are asked or measured more subtly. After all, that is what is deduced at the end of Myers' (1995) article when it talks about the female stereotype and affirms that the same car is sold at a higher price to women than to men.

Undoubtedly, the social changes that have taken place in the last few decades have contributed to an increase in the presence of women in public life, including research in psychology. In the case of achievement motivation, we have progressed from the idea that its study in women is irrelevant to the stance that its significance and content should be reviewed because of women's particular perception of achievement. The enrichment of this concept is likely to contribute to the development of new models for managing achievement motivation which favor the development of women's work careers. In spite of this, achievement goals should include, according to Coria (1993), social recognition and personal prominence, and they should transcend the limits of private aims. The results of our research show that, at least in the case of Spain, female university students still retain fears that lead them to associate undesirable consequences with the

ambition to succeed. Along these lines, the obstacles that limit access to the job market of the most highly qualified generation of women in Spain may include internal obstacles that had appeared to be overcome.

Notes

- 1 Remember that this is a projective test in which the individual must identify with the character.

References

- Bandura, A. (1997), *Self-efficacy. The Exercise of Control*, Freeman, New York, NY.
- Barberá, E. and Cantero, M.J. (1996), "Motivación del logro y categorización de género", in Garrido, I. (Ed.), *Psicología de la Motivación*, Síntesis, Madrid.
- Born, M.Ph. and Altink, W.M.M. (1990), "Models of achievement behavior and achievement motivation in predicting managerial performance", in Drenth, P.J.D., Sergeant, J.A., et al. (Eds), *European Perspectives in Psychology*, Vol. 3, John Wiley & Sons, Oxford.
- Coria, C. (1993), *Los laberintos del éxito. Ilusiones, pasiones y fantasmas femeninos*, Paidós, Barcelona-Buenos-Mexico.
- Durkin, K. (1985), "Sex roles and television roles: can woman be seen to tell the weather as well as a man?", *International Review of Applied Psychology*, Vol. 34 No. 2, pp. 191-201.
- Elliot, A.J. and McGregor, H.A. (2001), "A 2 x 2 achievement goal framework", *Journal of Personality and Social Psychology*, Vol. 80 No. 3, pp. 501-19.
- Expósito, F., Montes, B. and Palacios, M. (2000), "Características distintivas en la discriminación hacia las mujeres en el ámbito laboral", in Caballero, D., Méndez, M.T. and Pastor, J. (Eds), *La mirada Psicosociológica*, Biblioteca Nueva, Madrid.
- Glick, P. and Fiske, T. (1996), "The ambivalent sexism inventory: differentiating hostile and benevolent sexism", *Journal of Personality and Social Psychology*, Vol. 70 No. 3, pp. 491-512.
- Goldberg, P. (1968), "Are women prejudiced against women?", *Transaction*, Vol. 5, pp. 28-30.
- Hackett, G. (1995), "Self-efficacy and career choice and development", in Bandura, A. (Ed.), *Self-Efficacy in Changing Societies*, Cambridge University Press, New York, NY.
- Heckhausen, J. (1992), "Adult expectancies about development and its controllability: enhancing self-efficacy by social comparison", in Schwarzer, R. (Ed.), *Self-efficacy. Thought Control of Action*, Hemisphere Publishing Corporation, Washington, DC.
- Hoffman, L.W. (1972), "Early childhood experiences and women's achievement motives", *Journal of Social Issues*, Vol. 28, pp. 129-55.
- Horner, M. (1969), "A bright woman is caught in a double bind", *Psychology Today*, November, pp. 36-38/62.
- Lee, J. (1996), "The motivation of women entrepreneurs in Singapore", *Women in Management Review*, Vol. 11 No. 2, pp. 18-29.
- McClelland, D.C., Atkinson, J.R., Clark, R.A. and Lowell, E.L. (1953), *The Achievement Motive*, Appleton-Century-Crofts, New York, NY.

- Maccoby, E.E. and Jacklin, C.N. (1978), *The Psychology of Sex Differences*, Stanford University Press, Stanford, CA.
- Myers, D.G. (1995), *Psicología Social*, 4th ed., McGraw-Hill, Mexico.
- O' Connor, V.J. (2001), "Women and men in senior management a 'different needs' hypothesis", *Women in Management Review*, Vol. 16 No. 8, pp. 400-4.
- Ortega y Gasset, J. (1969), *El espectador*, Vol. II, Revista de Occidente.
- Penrod, S. and Cutler, B. (1995), "Witness confidence and witness accuracy: assessing their forensic relation", *Psychology, Public Policy and Law*, Vol. 1 No. 4, pp. 817-45.
- Pheterson, G.I., Kiesler, S.B. and Goldberg, P.A. (1971), "Evaluation of performance of women as a function of their sex, achievement, and personal history", *Journal of Personality and Social Psychology*, Vol. 19, pp. 114-18.
- Stein, A.H. and Bailey, M.M. (1976), "The socialization of achievement orientation in females", in Kaplan, A.G. and Bean, J.P. (Eds), *Beyond Sex-role Stereotypes. Readings Toward a Psychology of Androgyny*, Little, Brown and Co., Boston, MA.
- Tougas, F., Brown, R., Beaton, A.M. and Joly, S. (1995), "Neosexism: plus ça change, plus ç'est pareil", *Personality and Social Psychology Bulletin*, Vol. 21 No. 8, pp. 842-9.
- Veroff, J., Depner, C., Kulka, R. and Douvan, E. (1980), "Comparison of American motives: 1957 versus 1976", *Journal of Personality and Social Psychology*, Vol. 39, pp. 1249-62.

Further reading

- Instituto Nacional de Estadística (2003), *Encuesta de la Población Activa*, Septiembre.
- Instituto Nacional de Estadística (2004), *Anuario Estadístico de España, 2002-2003*.

Appendix

Figure A1

This is a short story about a medical student. John/Joan has studied conscientiously throughout his/her college years. He/She is a person who is content with him/herself. Upon graduating, he/she received a special award for achieving the best academic record at the University. Immediately afterwards he/she devoted him/herself completely to preparation for the 'MIR'^a examination. He/She took the exam at the first opportunity and achieved the number one place out of all Spain.

What were John/Joan's feelings, and what will the future hold for him/her?

Your task is to read the following statements and express what you think the probability is that John/Joan will go through the following moods and what his/her future will be. You can express your opinion on a score of 0 to 10. Zero indicates that the statement given is very unlikely, 10 indicates that it is very likely.

Note: ^a The 'MIR' is a state board examination which can be taken only by medical school graduates and which enables them to specialize and work within the Public Health System as interns

Figure A2

Do not hesitate to ask if you have any doubt about a question.

	Probability	
	Little	Maximum
1. He/She will be socially accepted.	0 1 2 3 4 5 6 7 8 9 10	
2. He/She will be overwhelmed by success.	0 1 2 3 4 5 6 7 8 9 10	
3. He/She will have a lot of friends.	0 1 2 3 4 5 6 7 8 9 10	
4. He/She will feel like a normal person.	0 1 2 3 4 5 6 7 8 9 10	
5. Loneliness will often weigh him/her down throughout his/her life.	0 1 2 3 4 5 6 7 8 9 10	
6. He/She will be happy.	0 1 2 3 4 5 6 7 8 9 10	
7. He/She will get married.	0 1 2 3 4 5 6 7 8 9 10	
	not very believable	very believable
8. This story is not believable.	0 1 2 3 4 5 6 7 8 9 10	

Figure A3

Yesterday you took a test which presented the success of a medical student. Some students had papers that said the person who was successful was John, others that it was Joan. Next we would like you to answer some questions about what you read yesterday.

1. – Do you remember having read about John or Joan? [JOHN] [JOAN]
Certainty with which you state it 0 1 2 3 4 5 6 7 8 9 10
2. – When you answered you were thinking about [JOHN] [JOAN] [WITHOUT GENDER]
Certainty with which you state it 0 1 2 3 4 5 6 7 8 9 10