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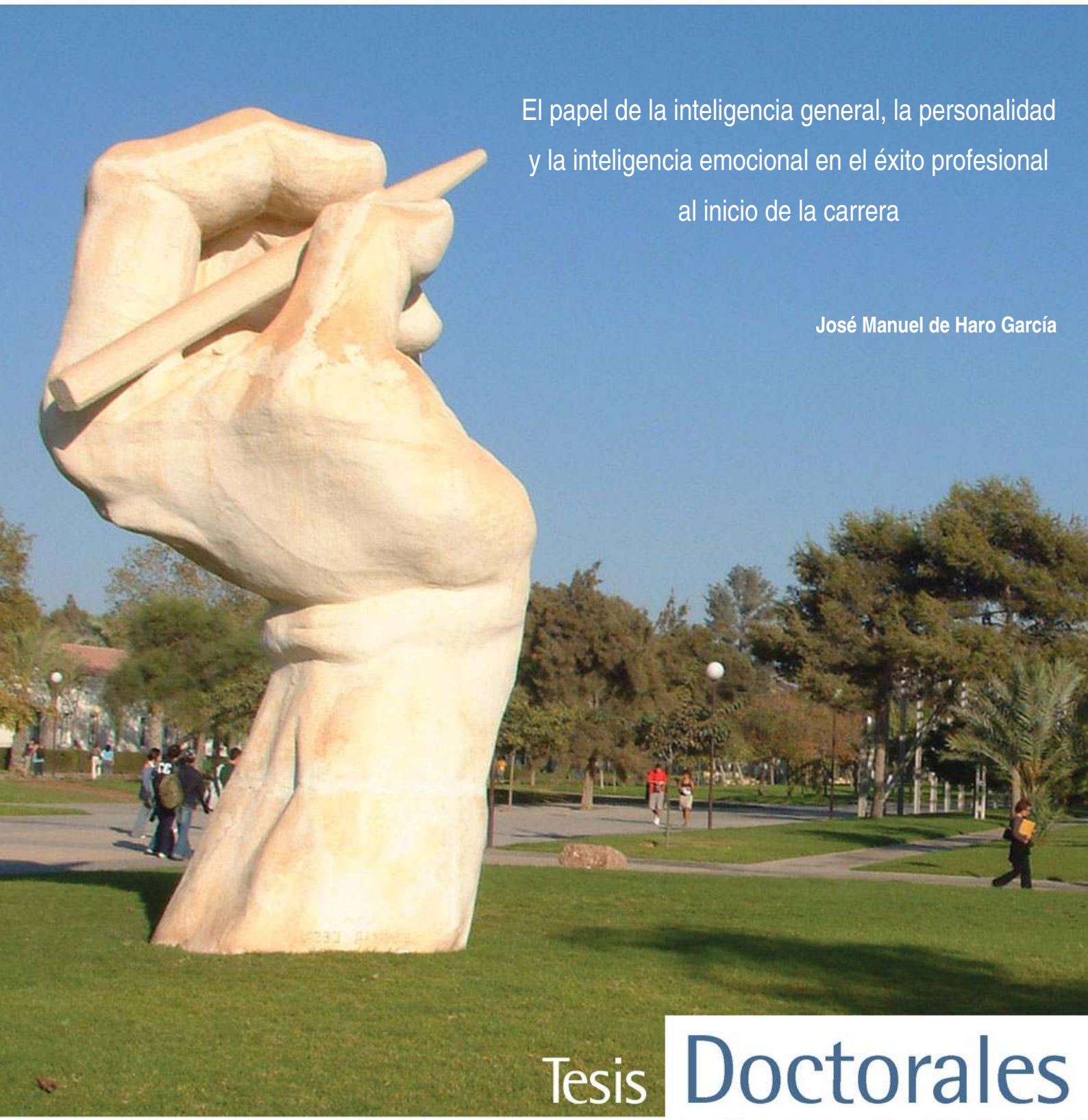

El papel de la inteligencia general, la personalidad y la inteligencia emocional en el éxito profesional al inicio de la carrera

José Manuel de Haro García

Tesis Doctorales

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El papel de la inteligencia general, la personalidad y la inteligencia emocional en el éxito profesional al inicio de la carrera.

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Por último, recordar que este trabajo ha sido parte del proyecto de investigación ref. PSI2009-12696, financiado por el Ministerio de Ciencia e Innovación.

Indice

La vida es como montar en bicicleta,
Si quieres mantener el equilibrio, debes seguir avanzando.

Albert Einstein.
Carta a su hijo Eduard, 1930.

0. Presentación.

La presente tesis doctoral, de acuerdo con la normativa vigente de la Universidad de Alicante y el informe correspondiente, autorizado por el Director de Tesis y Comisión de Doctorado de la Universidad de Alicante, se presenta como un compendio de tres trabajos previamente publicados. Las referencias completas de los artículos que constituyen el cuerpo de la tesis son as siguientes:

1. De Haro, J. M., & Castejón, J. L., (en prensa). **Perceived emotional intelligence, general intelligence and early professional success: predictive and incremental validity.** *Annals of Psychology*. Artículo aceptado en proceso de publicación.

2. De Haro, J. M., & Castejón, J. L., (en prensa). **Does trait emotional intelligence predict unique variance in early career success beyond IQ and personality?.** *Journal of Career Assessment*. Artículo aceptado en proceso de publicación. Published online before print December 11, 2013 DOI 10.1177/1069072713515971.

3. De Haro, J. M., Castejón, J. L., & Gilar, R., (2013). **General mental ability as moderator of personality traits as predictors of early career success.** *Journal of Vocational Behavior*, 83*(2),* 171-180. DOI 10.1016/j.jvb.2013.04.001

Del mismo modo, se incluye otro artículo en fase de revisión, que han formado parte del cuerpo general de la investigación llevada a cabo para esta tesis:

4. De Haro, J.M.; Castejón, J. L. & Gilar, R. **Personality effects in Early Career Success: the Mediating Effect of Emotional Intelligence.**

La *unidad temática* de los trabajos presentados para ser incluidos en el formato de tesis por compendio de publicaciones, se justifica perfectamente por su pertenencia a un mismo campo de estudio científico en cuyo ámbito se ubican las hipótesis planteadas que forman un cuerpo coherente, de tal manera, que los diferentes trabajos incluidos, forman parte de un proyecto de investigación financiado por el Ministerio de Ciencia e Innovación (ref. PSI2009-12696),

Las razones por las que esta tesis doctoral que aquí se presenta tenga este formato son, por un lado, la mayor agilidad que permite en la entrega de los resultados obtenidos a la comunidad científica, de manera casi simultánea a su realización, lo que hace que mantengan una mayor frescura sin perder originalidad por el paso del tiempo. Por otro lado, porque entendemos tiene un mayor valor, conferido por el hecho de que la calidad de los estudios incluidos haya sido validada por el prestigio de las revistas en las que se han publicado dichos trabajos.

Con respecto a las *aportaciones* de los trabajos, destacamos como aspectos más novedosos y relevantes los siguientes:

1. Establecer las relaciones entre las variables individuales más importantes: *inteligencia general, factores de personalidad e inteligencia emocional*, a la hora de predecir el éxito profesional al inicio de la carrera. Se incluyen tanto los efectos directos e indirectos (vía variables mediadoras o moderadoras).

2. Focalizarse en criterios de éxito profesional tanto extrínsecos como intrínsecos al principio de la carrera, que fue motivado tanto por la escasez de investigación sobre este estadio profesional (Rode, Arthaud-Day, Mooney, Near y Baldwin, 2008), como por la importancia de incluir criterios alternativos más allá del tradicional "*job performance*" a la hora de investigar las relaciones entre estas variables y varios tipos de trabajo como proponen Amelang y Steinmayr (2006).

3. Ser la primera vez que se estudian estas variables de manera conjunta para analizar las aportaciones de cada una de ellas en el éxito en la carrera profesional a su inicio con un *enfoque longitudinal*, al estár basados en datos de una misma muestra de egresados que se encontraban trabajando y que se ha seguido desde sus estudios universitarios hasta su inserción laboral, tres años después de finalizar estos estudios, lo que ha posibilitado en mayor medida la realización de inferencias causales.

La utilidad de los resultados de estos trabajos, deviene de su aplicabilidad para la mejora de la calidad en los procesos de *selección de personal*, derivada de la inclusión de predictores como las dimensiones de inteligencia emocional que habitualmente no se incluyen, y de la consideración de los mismos durante el diseño y desarrollo de *acciones formativas* en competencias socio-emocionales dirigidas a estudiantes universitarios

Por ultimo, y en relación a la apertura de nuevas vías de trabajo, los resultados de estos trabajos servirán de base en la investigación futura para explorar las relaciones tanto directas como indirectas, entre las diferencias individuales y el éxito en la carrera conceptualizado de manera alternativa a como se ha hecho hasta ahora, lo que permitirá obtener una mayor precisión en los pronósticos que se hagan sobre el rendimiento futuro.

1. Introducción: Delimitación del marco conceptual del estudio.

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Desde un punto de vista aplicado, un criterio es *lo que hay que predecir* (Guion, 1967). Su relevancia en las intervenciones dentro del area de psicología del trabajo y organizaciones como *variable dependiente* que es, (Tiffin & McCormick, 1965), le ha venido dada por su carácter de *norma de evaluación* que le ha permitido diferenciar de manera sensible entre el rendimiento de los individuos, fundamentalmente entre aquellos que tienen éxito, y los que no. Su capacidad para poder realizar esta discriminación ha sido desigual, variando en función de la forma en que ha sido operativizada, que se ha repartido entre aproximaciones que se han posicionado en alguna/s de las principales dimensiones que lo han caracterizado: criterios *objetivos* frente a criterios *subjetivos*, criterios *simples* frente a criterios *compuestos* o criterios *conductuales* frente a criterios basados en *resultados*.

En un sentido amplio, el rendimiento individual en el trabajo, que como criterio puede ser definido como *conducta* o como *resultado* (Williams, 2003), viene determinado tanto por factores externos (sistema) como por factores internos (personales).

Los *factores del sistema*, hacen referencia a características del entorno laboral como, los objetivos, las tareas, las políticas, las normas y procedimientos organizativos, el entorno físico, las herramientas del equipo, los materiales y suministros, las condiciones de trabajo, las acciones de los compañeros o la conducta del líder, (Blumberg y Pringle, 1982; Guzzo y Gannet, 1988; Schneider y Hough, 1995).

Los *factores personales, hacen referencia a aspectos internos del individuo como las* capacidades, los rasgos de personalidad, los conocimientos o la motivación, que actúan a través de las conductas relevantes para el trabajo, que inciden a su vez en los resultados.

Ambos tipos de factores, actúan sobre las conductas relevantes para el trabajo y sobre los resultados del trabajo, potenciándolos o limitándolos, de manera directa o indirecta, tal y como se representa en el gráfico que sigue (1).

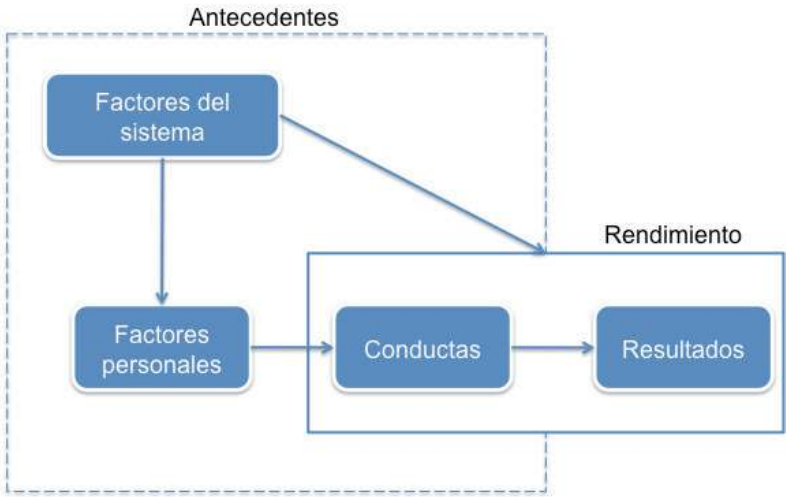

Figura 1. Antecedentes del rendimiento individual en el trabajo.

Forman parte de este marco relacional como elementos diferenciados, *el rendimiento,* dentro del cual*, los resultados* suelen actuar como *criterios* distintos de las conductas, y los *antecedentes,* tanto los factores de sistema como los personales, que actúan como predictores de las conductas. Dentro del rendimiento, la confusión de las conductas (el *cómo*), con los resultados (el *qué*), han dado lugar a cierta controversia (Williams, 2003), que ha sido contraproducente para la investigación.

A la hora de identificar los factores personales y organizacionales relacionados con los logros de los empleados en el trabajo, elegir un buen *criterio*, ha sido una de las tareas de las que más ha dependido el éxito de los psicólogos del trabajo y las organizaciones. Para poder elegir un buen criterio, es importante no olvidar *el momento* en que se toman las medidas del criterio, el *tipo de medida* y el *nivel de desempeño* elegido para determinar el éxito o el fracaso. Por último, conviene no olvidar los requisitos establecidos para un buen criterio hace ya bastantes años por Blum y Naylor, (1968): ser *apropiados, estables y prácticos.*

En nuestro caso, con respecto al primero de los elementos que intervienen en la ecuación que nos interesa delimitar en el planteamientro inicial de este trabajo, *los resultados*, el criterio elegido para este este estudio, es el *éxito en la carrera profesional*, que ha recibido una atención relativamente reciente por parte de los investigadores del comportamiento organizacional:

(Boudreau, Boswell, y Judge, 2001; Seibert y Kraimer, 2001; Wayne, Liden, Kraimer, y Graf, 1999).

Este criterio, definido como el *conjunto de logros o resultados positivos acumulados, reales y percibidos, fruto de la experiencia profesional* (Judge, Cable, Boudreau y Bretz, 1995; Seibert y Kramer, 2001), se ha venido evaluando mediante dos tipos de medidas: unas de tipo *objetivo* y otras de tipo *subjetivo* (Bretz y Judge, 1994; Gattiker y Larwood, 1990; Judge, Higgins, Thoresen, y Barrick, 1999; Ng, Eby, Sorensen, y Feldman, 2005).

El primer tipo de medidas, incluidas bajo la denominación de *criterios de éxito extrínsecos*, hacen referencia a resultados altamente visibles, objetivos y observables, como el salario, los ingresos, el número de promociones conseguidas, o el nivel jerárquico alcanzado (Jaskolka, Beyer & Trice, 1985; Judge y cols., 1995; Judge y Kammeyer-Mueller, 2007).

El segundo tipo de medidas, recogidas bajo la denominacion *criterios de éxito intrínsecos*, capturan los juicios subjetivos de los individuos acerca de sus logros profesionales, y son comunmente operacionalizadas mediante la evaluación de la satisfacción con el trabajo o con la carrera profesional (por ejemplo, Arnold y Cohen, 2008; Bray y Howard, 1980; Burke, 2001; Gattiker y Larwood, 1990; Judge y cols., 1995).

Dentro de los criterios de éxito extrínsecos, el *salario*, ha sido el indicador más amplia y frecuentemente utilizado en la investigación (Judge y Kammeyer-Mueller, 2007; Judge Klinger y Simon, 2010). De los estudios publicados relacionados con la carrera profesional en las revistas más importantes entre 1980 y 1994, más de 75% de ellos se centraron en criterios objetivos (Arthur y Rousseau, 1996). Su carácter observable, visible y objetivo (Jaskolka y cols., 1985), que los hace menos susceptibles de errores a los que se ven sometidos por ejemplo, las medidas de auto-informe (Heslin, 2005), y su facil accesibilidad (Hall, 2002), han contribuido a que se haya posicionado como una medida crucial del éxito individual (Zhang y Arvey, 2009). Su utilidad y beneficios han sido destacados por los investigadores que lo han empleado, habiendolo calificado no sólo como una de las medidas más robustas y consistentes del éxito en diferentes contextos (Abele y Spurk, 2009; Heslin, 2005) o un indicador

relevante del éxito profesional en la sociedad contemporánea (Gelissen y De Graf, 2006), sino también como la operacionalización predominante del éxito profesional extrínseco (Judge y cols., 2010; Ng y cols., 2005).

Otro de los criterios de éxito extrínseco frecuentemente utilizado, ha sido el *nivel ocupacional* o rango alcanzado dentro de una organización. También denominado prestigio ocupacional, se refiere a las percepciones sociales de poder y autoridad en el trabajo. Dado que el estatus ocupacional puede ser interpretado como un reflejo de las percepciones sociales del poder y la autoridad que da el trabajo (Schooler y Schoenbach, 1994), éste indicador viene a reflejar la posición social de una determinada ocupación (Korman, Mahler, y Omran, 1983), en consonancia con el punto de vista de los sociólogos, que lo consideran como uno de los signos más importantes de éxito en la sociedad contemporánea (Korman y cols., 1983).

Con respecto a los criterios de éxito *intrínsecos*, éstos han sido operacionalizados de diferentes maneras. El indicador más común para el éxito intrínseco, es la autoevaluación con respecto a la satisfacción con su carrera. Los ítems que se ajustan mejor a esta evaluacion, son aquellos que solicitan al empleado que indique directamente *cómo se siente sobre su carrera en general, si cree que ha logrado aquello que quería o si considera que sus perspectivas de futuro son buenas* (Boudreau y cols., 2001; Judge y cols., 1999; Seibert y Kraimer, 2001). Aunque la satisfacción con el trabajo, está relacionada con la satisfacción con la carrera, éstos son constructos diferentes. La satisfacción con el trabajo, está más relacionada con la reacción emocional al *trabajo actual*, mientras que la satisfacción con la carrera es una reflexión más amplia sobre la satisfacción con el *pasado y el futuro laboral* como un todo.

Los expertos sostienen, que los indicadores objetivos, son conceptualmente distintos de los indicadores subjetivos (Greenhaus, Parasuraman, y Wormley, 1990; Judge y cols., 1995), teniendo incluso predictores diferentes cada uno de ellos (Ng et al, 2005). Recientes meta-análisis, (Dette, Abele, y Renner, 2004; Ng et al, 2005), han revelado correlaciones no superiores a 0,30 entre ellos, lo que junto a otras evidencias (Bray y Howard, 1980; Judge y Bretz, 1994), llevan a algunos investigadores, a

argumentar que *es importante evaluar ambos aspectos*, debido a que el significado de una carrera sólo se puede entender si se toman en cuenta diferentes criterios (Arthur, Khapova, y Wilderom, 2005; Heslin, 2005).

Con respecto al segundo elemento del marco relacional propuesto en este trabajo, *los antecedentes*, consideramos necesario en este planteamiento de partida, analizar el efecto de la ubicación de los factores determinantes del logro individual (predictores), dentro del proceso de *conexión causal predictor-criterio*, ya que no todos los predictores desempeñan el mismo papel ni ocupan el mismo orden, en su conexión con un criterio. En unos casos, el predictor se sitúa más lejos del criterio mientras que en otros casos se puede encontrar más cerca del mismo. En el primer caso, ocupa una posición más *distal*, en el segundo, ocupa una posición más *proximal*. La mayor distancia o separación con respecto al criterio en la cadena causal, indica posiblemente un carácter más estable en la variable predictiva, lo que podría ocurrir por ejemplo con un factor de personalidad; mientras que una mayor proximalidad, reflejaría un carácter más maleable en el predictor, como por ejemplo podría ocurrir con las expectativas o metas (Spurk and Abele, 2011).

El modelo de rendimiento individual de Campbell, McCloy, Oppler, y Sager, (1993), sería un ejemplo de planteamiento teórico que incluye variables proximales de la conducta. En él, se establecen tres determinantes básicos de la misma: el c*onocimiento declarativo, los conocimientos sobre procedimientos y la motivación.* La causa directa de lo que hacen las personas, según estos autores, es una función de esos tres elementos. A estos tres determinantes subyacen ciertos predictores o antecedentes, algunos de tipo interno como *capacidades, rasgos de personalidad, intereses*, y otros externos como la *educación y la experiencia*, es decir antecedentes que constituyen variables distales.

En esta cadena de conexiónes distales o proximales entre predictores y criterios, el efecto del predictor sobre el criterio, puede además ser *directo o indirecto*. En el primer caso, lo hace sin la mediación de ningún otro predictor, en el segundo caso, lo hace a través de una variable mediadora.

Podemos considerar, por tanto que los predictores pueden ser ubicados en el continuo de la cadena causal teniendo en cuenta su separación o distancia

con respecto al efecto que producen en el criterio y la consideración de que su efecto sea directo y/o indirecto. Esto implica reconocer que el hecho de que una variable predictora tenga un carácter distal, no implica que sus efectos tengan que ser mediados por otra variable proximal, ya que éstos pueden ser indirectos pero también directos. En el caso de una variable proximal, lo más probable es que su efecto sea directo, dada su cercanía con el criterio, pero esta cercanía no implica tampoco que pueda actuar como variable mediadora de otro predictor más distal.

Trabajos como los de Boudreau y cols., (2001), Spurk y Abele, (2011) o Zhang y Arvey, (2009), constituyen ejemplos de la consideración del rol diferenciado del predictor como variable distal-proximal en el proceso de causación, al haber analizado la mediación de terceras variables en la conexión entre la personalidad como variable distal y el salario como criterio.

Además de la posición en la cadena causal, las relaciones entre predictor y criterio pueden estar sujetas a la influencia de procesos de *interacción* entre los predictores, sean distales o proximales. Los modelos de expectativa en psicología del trabajo y organizaciones que conceptualizan el rendimiento como la interacción entre la habilidad y el esfuerzo (motivación) u otras variables estables de personalidad, son un ejemplo de este tipo de efectos (ver los trabajos de Coté y Miners, 2006 o de O'Reilly y Chatman, 1994). Las conclusiones de estos estudios ponen de manifiesto que la validez de un predictor, puede aumentar cuando se consideran sus efectos no de modo aislado sino en combinación con otros predictores (Hollenbeck y Whitener, 1988; Schmidt y Hunter, 1998).

La literatura científica que describe los *antecedentes y los correlatos* del *éxito en la carrera profesional*, ha propuesto formas diversas de identificar y ordenar estas variables (Judge y Hurst, 2007; Lyubomirsky, King y Diener, 2005; Miech, Eaton, y Liang, 2003).

Uno de los trabajos que representa de una manera general estos intentos de clasificación, es el meta-análisis de Ng, y cols. (2005). Estos autores, ponen de manifiesto que los predictores del éxito en la carrera se sitúan en alguna de las siguientes cuatro categorías (gráfico 2): *variables de carácter sociológico* (como

sexo, edad*), variables de tipo organizacional* (como el apoyo de los jefes o el tamaño de la organización*), variables de capital humano* (como la experiencia laboral o la formación), *o las diferencias individuales* (como la inteligencia o la personalidad).

Figura 2. Predictores del rendimiento laboral, según meta-análisis de Ng, y cols. (2005).

En los trabajos incluidos en esta tesis tesis doctoral, nos centramos en la cuarta categoría: *los determinantes individuales*. La finalidad de los mismos, es *caracterizar las relaciones entre los predictores individuales más relevantes y el criterio definido como el éxito en la carrera profesional.* Para ello, se tiene en cuenta tanto la diferenciación distal-proximal de los predictores, como acabamos de comentar, como la diferenciación entre sus efectos directos e indirectos. No se incluyen como objeto de estudio de este trabajo, ni las conductas que intervienen en el proceso de causación, ni los factores del sistema.

Tras la delimitación del marco conceptual de partida descrito en este planteamiento general, el paso siguiente para avanzar hacia la meta general establecida, es conocer la situación de partida y la problemática puestas de manifiesto por la investigación que ha analizado las conexiones entre este tipo de p*redictores y el criterio* elegido, aspectos éstos que constituyen el contenido del apartado siguiente.

2. Predictores individuales del éxito en la carrera profesional.

- **2.1. Inteligencia general.**
- **2.2. Personalidad.**
- **2.3. Inteligencia emocional.**

2. Predictores individuales del éxito en la carrera profesional.

Como se ha explicado en el apartado anterior, el presente conjunto de trabajos se sitúa en la cuarta de las categorías de predictores: *las diferencias individuales*. Dentro de esta categoría, parece existir un cierto acuerdo, en que la inteligencia y la personalidad son los dos campos que más han interesado a los psicólogos (Eysenck, 1994; Cooper & Robertson, 1995). A pesar de ello, y aunque hasta la fecha bastantes trabajos han analizado la respectiva contribución de la *inteligencia general*, y la *personalidad* a la hora de predecir rendimiento profesional, no hay consenso en cuanto a la naturaleza y alcance de los mismos.

Por otro lado, y aunque en la literatura se reconoce la validez de otros predictores de resultados en el trabajo como la *inteligencia emocional* (IE), la determinación de una manera inequívoca del papel que juega en relación a los anteriores no es fácil de determinar.

Aspectos como el *tipo de criterio utilizado*, la forma concreta de *medir el predictor*, el tipo de *muestra empleada* o el *momento profesional* en que se han tomado los datos, han dificultado la caracterización de las relaciones entre predictores y criterios.

En el resumen que presentamos a continuación, se presenta, de una manera sintética, el estado de la cuestión en relación a los hallazgos más relevantes sobre las relaciones entre los predictores individuales más importantes y el éxito en la carrera profesional, que como se verá muestra un panorama más complejo y menos claro del que se podría esperar si no se hiciera este análisis previo.

2.1. Inteligencia general.

Desde que Spearman introdujera el concepto de *inteligencia general* (IG) en 1904, tanto éste como el *factor* "*g*", o la *capacidad mental general*, han sido utilizados de manera indistinta para expresar el potencial de aprendizaje que define a la capacidad intelectual (Hunter, 1986). Una capacidad mental tan general, que entre cosas implica la habilidad de *razonar, planificar, resolver*

problemas, pensar de manera abstracta, comprender ideas complejas o aprender de la experiencia (Gottfredson, 1997).

Este constructo, que ha sido calificado como el mejor predictor en la mayoría de las situaciones laborales (Schmidt y Hunter, 2004), y que para algunos investigadores no tiene rival en ningún otro rasgo psicológico (Ree y Earles, 1992), ha mostrado su supremacía en estudios realizados con muestras de Estados Unidos (Anderson, Born y Cunningham-Snell, 2001), Reino Unido (Bertua, Anderson y Salgado, 2005) y Comunidad Europea (Salgado, Moscoso, de Fruyt, Anderson, Bertua y Rolland, 2003).

En este sentido, la capacidad de predicción de la *inteligencia general*, ha sido puesta de manifiesto de manera reiterada con respecto al rendimiento laboral, a través de ocupaciones y carreras, (Cooper y Robertson, 1995; Dreher y Bretz, 1991; Judge y cols., 1995; Kuncel, Hezlett y Ones, 2004; Hunter y Hunter, 1984; Ng y cols., 2005; Schmidt y Hunter, 2004), no solo en contextos civiles sino también en contextos militares (McHenry, Hough, Toquam, Hanson y Asworth, 1990; Schmidt, Ones y Hunter, 1992).

Entre las *razones* por las que la inteligencia general predice tan bien el rendimiento en el trabajo, se señala, que la inteligencia general facilita la adquisición de conocimientos de manera más rápida, eficaz y duradera (Hunter y Schmidt, 1996). Las altas correlaciones entre *aptitudes cognitivas y el aprendizaje*, entre inteligencia general y *complejidad del trabajo, y amplitud de la función* laboral (Gottfredson, 2003; Morgeson, Delaney-klinger y Hemingway, 2005), sirven de apoyo a este tipo de explicaciones. Tener un CI más alto significa, puesto que las pruebas de inteligencia miden la velocidad a la que los individuos procesan la información (Anderson, 1992), ser capaz de aprender más y mejor, lo que facilita conseguir un mayor nivel o categoría laboral (Jensen, 1980). Además, la IG ejerce su influencia de una manera estable a lo largo del tiempo (Judge y cols., 2010).

Sin embargo, los resultados que muestran el poder de la IG como predictor, no siempre se han manifestado de manera homogénea. Aspectos como el *tipo de criterio* utilizado ha influído en los resultados obtenidos (Judge y

cols., 1995), de forma que cuando se han incluido criterios distintos a los tradicionalmente utilizados como las evaluaciones del supervisor sobre el rendimiento, los resultados no han sido tan consistentes.

Así, autores como Gottfredson (2004), que han incluido criterios de éxito extrinseco como la categoría profesional o ingresos, estiman que un 25% de la variabilidad observada en los mismos, responde a diferencias (genéticas) en inteligencia. En cambio, otros trabajos (Dreher y Bretz, 1991; Howard y Bray, 1990; Judge y cols., 1999; Ng y cols., 2005; O´Reilly y Chatman, 1994), muestran relaciones que van desde ligeramente a moderadamente positivas. Por otro lado, cuando los criterios de éxito considerados han sido de caracter intrínseco como la *satisfacción con el trabajo*, las correlaciones obtenidas entre capacidad mental general y estos criterios han sido negativas o no significativas (Colarelli, Dean y Konstans, 1987; Ganzach, 1998; Rode, Arthaud-Day, Mooney, Near y Baldwin, 2008).

También el *momento temporal*, parece influir en la producción de resultados discrepantes. Por un lado, estudios longitudinales como los de Austin y Hanish, (1990), o Wilk, Desmarais y Sackett, (1995), han mostrado que una mayor capacidad intelectual, está relacionada con un mayor nivel en la escala profesional obtenida con el paso de los años. Los sujetos con mayor capacidad intelectual suelen ocupar mejores puestos y percibir salarios más altos que los sujetos menos inteligentes (Jude y cols., 1999; Murray, 1998). Sin embargo, parece lógico asumir que la inteligencia podría ser un factor muy importante al comienzo de la carrera, dado que en este momento es cuando los empleados deben aprender procedimientos y los nuevos puestos tienen más carga de factor "g", al demandar que las personas sepan adaptarse y reaccionar rápida y eficazmente. Sin embargo, los pocos estudios llevados a cabo en el inicio de la carrera profesional (O´Reilly y Chatman, 1994; Rode y cols., 2008), no han encontrado relación directa entre estas capacidades y el éxito en la carrera. Otros autores, por su parte manifiestan dudas sobre la estabilidad de la inteligencia a lo largo de toda la vida (Chamorro-Premuzic y Furham, 2010).

No obstante, a pesar de los argumentos en contra del uso de pruebas de

inteligencia general, ésta parece ser un indicador práctico y preciso de la capacidad que tienen las personas para aprender cosas nuevas, resolver problemas complejos o adaptarse al entorno (Chamorro-Premuzic y Furnham, 2010). Sin embargo, su capacidad explicativa, como cabe esperar de cualquier predictor, no es completa. Los propios autores Hunter y Hunter (1984), establecieron en un 25%, las mejores estimaciones sobre la varianza explicada por el Coeficiente Intelectual (CI). Sternberg (1996), por su parte, recoge varios estudios en los que se reduce esta varianza a un valor más ajustado: 10%. Por tanto y a pesar de su utilidad, *la inteligencia general no es el único determinante individual del éxito laboral, lo que hace que tengamos que considerar a otros constructos para poder explicar de una manera más completa los logros laborales.*

2.2. Personalidad.

Como se acaba de exponer, a pesar del importante poder predictivo de la inteligencia general, los expertos coinciden en que no debe utilizarse como predictor único del rendimiento laboral, ya que hay otros rasgos, como por ejemplo la responsabilidad, que poseen una validez incremental importante a la hora de explicar la varianza en ciertos resutados laborales (Bobko, Roth y Potosky, 1999; Schmidt y Hunter, 1998).

Un considerable cuerpo de investigación indica que, entre los predictores alternativos a la inteligencia general, los factores de personalidad son variables importantes en la predicción de criterios como el desempeño efectivo en diferentes puestos (p.e. Abele y Spurk, 2009; Ariza, 2001; Barrick y Mount, 1991; Boudreau y cols., 2001; Cherniss, 2001; Eby, Butts y Lockwood, 2003; Friedman, Hall y Harris, 1985; Kammeyer-Mueller, Judge, y Piccolo, 2008; Lau y Schaffer, 1999; McHenry y cols., 1990; Mount y Barrick, 1995; Ng. y cols., 2005) o la satisfacción en el trabajo (Judge, Heller, y Mount, 2002).

Ciertos aspectos del rendimiento, como demostrar esfuerzo, pueden predecirse mediante cuestionarios que miden rasgos de personalidad (Viswesvaran y Ones, 2000). Así, se ha puesto de manifiesto la existencia de relaciones entre factores como *locus de control, auto-control, autoestima, optimismo, maquiavelismo* y el éxito en la carrera profesional (Lau y Schaffer, 1999), la

integridad (Bobko, Roth y Potosky, 1999), el prestigio ocupacional y los ingresos, (Kammeyer-Mueller, Judge y Piccolo, 2008).

Estos factores, proporcionan en algunos casos validez incremental a la hora de predecir resultados en el trabajo más allá de los factores aptitudinales (Bobko y cols., 1999; Judge y cols., 1999), mostrando la pertinencia y utilidad de ser incluidos además como predictores junto a los primeros.

Entre los factores de personalidad que han mostrado relaciones positivas con criterios de éxito profesional, aquellos basados en el *modelo de los cinco grandes* (*Five Factor Model*), han ocupado una gran parte de las investigaciones tanto en estudios tradicionales como en estudios meta-analíticos en Estados Unidos (Boudreau y cols., 2001; Ng y cols., 2005) y en la comunidad Europea (Salgado, 1998). La correlación conocida como "the big-five salary link" (*conexión cinco grandes-salario*), indica que los empleados con una particular configuración de factores de personalidad trabajan más duro, y ganan más dinero (Dilchert y Ones, 2008; Hülsheger, Specht y Spinath, 2006; Nyhus y Pons, 2005; Seibert y Kraimer 2001, Spurk y Abele, 2011).

Las conclusiones predominantes en este grupo de trabajos, apuntan a que la *Responsabilidad, la Extraversión y la Estabilidad emocional*, se relacionan de forma positiva con el desempeño laboral, la remuneración y la ganancia en estatus profesional mientras el *Neuroticismo* lo hace de manera negativa con estos criterios (Barrick y Mount, 1991; Gelissen y De Graaf, 2006; Judge y cols., 1999; Ng y cols., 2005; Rode y cols., 2008; Spurk y Abele, 2011; Tett, Jackson y Rothstein, 1991).

Así y con relación al factor *Responsabilidad*, la mayoría de los resultados indican una relación positiva entre responsabilidad, salario y satisfacción con el trabajo (Barrick y Mount, 1991; Judge y cols., 1999; Judge y cols., 2002; Judge y Kammeyer-Mueller, 2010; Sutin, Costa, Miech y Eaton, 2009).

Con respecto al factor *Neuroticismo*, se ha encontrado que éste correlaciona negativamente con ambos criterios (extrínsecos e intrínsecos del éxito professional (Boudreau y cols., 2001; Gelissen y De Graaf, 2006; Judge y cols., 1999; Judge y cols., 2002; Judge y Kammeyer-Mueller, 2007; Ng y cols.,

2005; Nyhus y Pons, 2005; Rode y cols., 2008; Seibert y Kraimer, 2001; Salgado, 1998; Smithikrai, 2007; Sutin y cols., 2009).

Por otro lado, se han encontrado relaciones positivas entre el factor *Extraversion* y criterios de éxito professional como salario (Gelissen y De Graaf, 2006; Judge y cols., 1999; Judge y Kammeyer-Mueller, 2010; Rode y cols., 2008; Seibert y Kraimer, 2001; Sutin y cols., 2009) y satisfacción (Boudreau y cols., 2001; Judge y cols., 2002; Seibert y Kraimer, 2001).

Por su parte, y aunque el factor *Agradabilidad* puede ser una ventaja en posiciones que requieran interacción con otras personas, la mayoría de los estudios han encontrado una relación negativa entre este factor y el éxito en la carrera medido como salario (Boudreau y cols., 2001; Judge y cols., 1999; Ng y cols., 2005; Nyhus y Pons, 2005; Rode y cols., 2008; Seibert y Kraimer, 2001). Con respecto a la satisfacción, de manera generalizada, se ha obtenido una relación positiva entre ésta y la agradabilidad (Bozionelos, 2004; Judge y cols., 2002), aunque tambien han sido encontradas relaciones negativas (Seibert y Kreimer, 2001). Para el nivel ocupacional alcanzado, se han evidenciado relaciones o negativas (García-Izquierdo, García-Izquierdo y Ramos-Villagrasa, 2007) o no significativas (Gelissen y De Graaf, 2006) entre ambos. Para otros criterios como el desempeño laboral (Hurtz y Donovan, 2000; Sutin y cols., 2009) o el éxito en la busqueda de trabajo, las asociaciones obtenidas han sido positivas (Boudreau et al., 2001).

Finalmente, los resultados obtenidos con el factor *Apertura*, han sido los más inconsistentes. Tenemos por un lado resultados que muestran una relación positiva con el éxito en la carrera (Bozionelos, 2004; Gelissen y De Graff, 2006; Ng y cols., 2005; Palifka, 2009; Seibert y Kreimer, 2001; Tett y cols., 1991; Van der Linden, Te Nijenhuis y Bakker, 2010), y por otro estudios que encuentran relaciones negativas (Furnham, Taylor y Chamorro-Premuzic, 2008) o ausencia de relación (Barrick y Mount, 1991; Boudreau y cols., 2001). Los resultados con respecto a la satisfacción con el trabajo, han sido tambien variados, distribuyendose los estudios en un rango que va desde estudios que no han encontrado relación (Judge y cols., 2002), o ésta ha sido ligera (Boudreau y cols.,

2001), a otros que han encontrado relaciones positivas (Eby y cols., 2003; Sutin y cols., 2009).

En suma, no se duda pues del carácter predictivo de los factores de personalidad, puesto que éstos contribuyen de manera significativa al éxito profesional (Gelissen y De Graaf, 2006), sino la magnitud de esta relación y superioridad con respecto a predictores como la inteligencia general, de forma que algunos autores creen que su validez incremental es limitada (McHenry y cols., 1990; O'Boyle, Humphrey, Pollack, Hawver y Story, 2011).

Una manera de reforzar su papel como predictor, ha sido considerar su contribución no de manera aislada, sino en interacción con otros predictores como la inteligencia general. Sobre esta línea de trabajo, los pocos estudios que se han llevado a cabo hasta el momento, han aportado resultados no concluyentes, dado que en algunos casos, se ha encontrado interacción (O'Reilly y Chatman, 1994), y en otros no (Rode y cols., 2008). Otra opción, es seguir buscando predictores alternativos que nos permitan alcanzar la predicción más completa posible a partir de variables individuales. De los predictores alternativos posibles, destaca por la atención que ha merecido de los investigadores, la inteligencia emocional.

2.3. Inteligencia emocional.

En la actualidad hay un considerable cuerpo de investigación que sugiere que la *inteligencia emocional* (IE), proporciona la base de las competencias sociales y emocionales que son importantes para el éxito en casi cualquier trabajo (Boyatzis, Goleman & Rhee, 2000; Derksen, Kramer y Katzko, 2002; Guillén, Saris y Boyaztis, 2009; Law, Wong, y Song, 2004; Sala y Dwight, 2002).

Este constructo, cuyos orígenes se extienden a los trabajos de autores como Thorndike (1920) o Gardner (1983), quienes señalaron la importancia de la conciencia y la comprensión emocional como componentes de la inteligencia social, ha sido conceptualizado bajo dos modelos principales: los de *habilidad*

(Mayer, Salovey y Caruso, 2000) y los *mixtos* (Bar-On, 1997; Goleman, 1998; Schutte, Malouff, Hall, Haggerty, Cooper, Golden, y Dornheim, 1998).

Los primeros, definen la IE como una forma de inteligencia social que incluye la capacidad para ser consciente de los sentimientos y emociones propias y de los demás, de discriminar entre ellas y de utilizar esta información para guiar el pensamiento y la acción propia (Salovey y Mayer, 1990). Estos autores, en una versión revisada de su definición, integran sus componentes en su modelo conocido como el de las *cuatro ramas de la IE* (Mayer y Salovey, 1997): *percepción de las emociones, uso de las emociones para facilitar el pensamiento (facilitación emocional), comprensión de las emociones y gestión de las emociones.*

Los segundos, combinan competencias cognitivas con competencias interpersonales, habilidades sociales y otros factores disposicionales como optimismo o motivación (Boyatzis et al., 2000). Los modelos mixtos, presentan a la IE como un conjunto de competencias como autoconocimiento, automotivación, autoregulación, empatía, habilidades sociales, asertividad, tolerancia al estrés, control del impulso o afrontamiento del estrés (Zeidner, Matthews, y Roberts, (2003), que permitirían a los individuos ser más efectivos a la hora de responder a los requerimientos laborales. Estas competencias, han sido agrupadas como un conjunto de dimensiones cercanas al dominio de la personalidad (*habilidades intra-personales, habilidades inter-personales, adaptabilidad, gestión del estrés y estado de ánimo general* (Bar-On; 1997)), o como un conjunto de dimensiones dimensiones de carácter competencial (*autoconciencia, autogestión, conciencia social y habilidades sociales* (Goleman, 1998)).

Estas formas alternativas de entender la IE, juegan distintos roles en la relación de la misma con el rendimiento en el trabajo, y determinan a su vez el *tipo de instrumento de evaluación utilizado*, que puede adoptar la forma de prueba de habilidad o de medida de auto-informe.

Al primer tipo de pruebas, tambien denominadas *medidas de rendimiento máximo*, pertenecen por ejemplo el Mayor Salovey Caruso Emotional Intelligence test (MSCEIT), de Mayer, Salovey, Caruso, y Sitarenios, (2001), basado en los modelos de habilidad.

Con respecto al segundo tipo de pruebas, auto-informes, tambien denominados *medidas de rendimiento típico*, podemos establecer a su vez dos categorías. La primera, que incluye a aquellas pruebas basadas en el modelo de habilidad de Salovey y Mayer (1990), y que evalúan las percepciones individuales de sus competencias emocionales, como por ejemplo el Trait Meta-Mood Scale (TMMS), de Salovey, y cols., (1995). La segunda, incluye aquellas medidas que se han centrado en factores no cognitivos como habilidades sociales, autoestima y dimensiones de personalidad como por ejemplo, el Emotional Quotient Inventory (EQ-i), de Bar-On, (1997), el Schutte Self Report Inventory (SSRI), de Schutte, Malouff, Hall, Haggerty, Cooper, Golden, y Dornheim, (1998), el Emotional Competence Inventory (ECI) de Boyatzis y cols., 2000); o el Trait Emotional Intelligence Questionnaire (TEIQue), de Petrides, Pita y Kokkinaki, (2007).

La importancia del constructo IE, ha sido analizada en numerosos estudios que han mostrado su *capacidad predictiva* con respecto a diferentes criterios de éxito tanto académicos como profesionales (Brackett y Mayer, 2003; Côté y Miners, 2006; Brackett, Rivers y Salovey, 2011; Dulewicz, Higgs y Slaski, 2003; Lam y Kirby, 2002; Lopes, Grewal, Kadis, Gall y Salovey, 2006; Lyons y Schneider, 2005; Van der Zee, Thijs y Schakel, 2002; Van Rooy y Viswesvaran, 2004).

Estos resultados positivos, se han obtenido tanto en estudios basados en modelos de habilidad (Daus y Ashkanasy, 2005; Lopes, Brackett, Nezlek, Schutz, Sellin y Salovey, 2004; Rossen y Kranzler, 2009), como en estudios basados en modelos mixtos de inteligencia emocional (Bar-On, Handley y Fund, 2005; Epstein, 2003), extendiéndose también su carácter predictivo a otros criterios como la eficacia directiva (Boyatzis, Good y Massa, 2012; Harms y Credé, 2010; Semadar**,** Robins y Ferris, 2006) o la satisfacción en el trabajo (Carmeli, 2003).

A estos resultados hay que añadir los hallazgos que han mostrado la *validez incremental* de la inteligencia emocional sobre la inteligencia general, y los factores de personalidad a la hora de predecir resultados en el trabajo e

indicadores - tanto extrínsecos como intrínsecos - del éxito profesional (Bastian, Burns y Nettelbeck, 2005; Iliescu, Ilie, Ispas y Ion, 2012; Joseph y Newman, 2010; Law, Wong, Huang y Li, 2008; O'Boyle, y cols., 2011; Rode, Mooney, Arthaud-Day, Near, Baldwin, Rubin y Bommer, 2007).

Sin embargo, los efectos de la inteligencia emocional sobre el éxito no parecen tener una influencia clara, simple o directa. Algunos hallazgos han conducido a algunos autores a concluir que la IE falla a la hora de aportar validez incremental en la predicción del desempeño o éxito profesional más allá de la inteligencia general y la personalidad (Amelang y Steinmayer, 2006; Antonakis, 2004; Barchard, 2003; Byrne, Dominick, Smither y Reilly, 2007; Joseph y Newman, 2010; Landy, 2005; Rode, y cols., 2008; Schulte, Ree y Carretta, 2004).

Los resultados no concluyentes obtenidos en los diferentes estudios que pretenden determinar la superioridad de la IE sobre variables como la inteligencia general y los factores de personalidad, y así poder responder con certeza a la cuestión de si la IE predice una varianza única en el desempeño laboral o el éxito profesional, posiblemente estén relacionados con *el modelo de IE adoptado* y el tipo de *medidas de IE utilizadas* (Ashkanasy y Daus, 2005; O'Boyle y cols., 2011).

De la misma manera en que el tipo de modelo influye en el tipo de medida utilizada del IE, el tipo de medida tiene importantes implicaciones teóricas. En un intento de enfatizar la importancia de la medida en la operacionalización de la IE, Petrides y Furnham (2000), propusieron una distinción entre IE habilidad e IE rasgo. La primera abarca habilidades que se miden mediante pruebas de rendimiento máximo, y la segunda tiene que ver con disposiciones y habilidades autopercibidas que se miden mediante auto-informe. Estos modelos de rasgo (Trait IE), definen a la IE como una constelación de autopercepciones de tipo emocional situada en los niveles inferiores de las jerarquías de la personalidad (Petrides y cols., 2007), cuyo estudio debe hacerse bajo modelos de personalidad en el campo de las diferencias individuales. Frente a ellos, la IE como habilidad, pertenecería al dominio de la cognición y debería ser estudiada primariamente bajo modelos

de inteligencia psicométrica. Incluso proponen (Petrides y Furnham, 2001), dos etiquetas alternativas para evitar inconsistencias semanticas: Autoeficacia emocional (rasgo) y habilidad cognitivo-emocional (habilidad).

No se puede hablar, por tanto, de la IE como un constructo único y generalizable, sino de diferentes formas de concebir y medir la IE que determinan resultados diferentes. Como mostraron Ashkanasy y Daus (2005), quienes clasificaron los resultados obtenidos por la investigación en tres grupos: (1) Estudios basados en el modelo de las cuatro ramas definido por Mayer y Salovey (1997); (2) Estudios que utilizaban medidas de auto-informes basadas en el modelo de Mayer-Salovey y (3) Estudios que utilizaban pruebas comerciales más allá del modelo de Mayer-Salovey (modelos mixtos); la contribución a la varianza incremental explicada por ellos difería, siendo mejor para los estudios de los grupos 2 y 3 y menor para el grupo 1 (O´Boyle y cols. 2011). Incluso utilizando el mismo modelo, los resultados han sido incongruentes. Por ejemplo, para medidas basadas en modelos de habilidad, mientras algunos autores han encontrado relaciones significativas positivas entre IE y medidas del rendimiento en el trabajo (Iliescu y cols., 2012; Lyons y Schneider, 2005), otros han reportado resultados opuestos (Amelang y Steinmayer, 2006; Joseph y Newman, 2010).

Además del modelo y tipo de medidas de la IE empleados, otros factores como el criterio utilizado (p.e. *habilidades para la vida vs. rendimiento laboral*), el tipo de muestras utilizadas (p.e. *estudiantes vs trabajadores*), el método de puntuación utilizado (p. e. *evaluación de expertos vs. autoinformes*), o las dimensiones de IE consideradas, han influido en la producción de resultados dispares sobre la validez incremental de la IE (Amelang y Steinmayr, 2006; Bastian, Burns, y Nettelbeck, 2005; Van Rooy y Viswesvaran, 2004).

Como ha señalado Antonakis (2004), las contradicciones e inconsistencias en este campo, subrayan la importancia de utilizar criterios científicos metodológicamente defendibles para la realización o evaluación de investigaciones. Por lo tanto, dado que los resultados sobre la validez incremental de la IE son ambiguos y requieren más investigación futura, es necesario continuar con la búsqueda de más datos (Amelang y Steinmay, 2006).

En resumen, aunque algunos estudios han mostrado que el éxito profesional en buena medida está determinado por la inteligencia general, los factores de personalidad o la inteligencia emocional, no ha sido fácil hasta el momento establecer la predominancia clara de uno de los predictores sobre el resto, ni sus relaciones a la hora de explicar los diferentes tipos de resultados organizacionales.

Es importante, por tanto, realizar estudios que exploren el grado en que la *inteligencia general, los factores de personalidad y la inteligencia emocional*, predicen el éxito profesional en una etapa que consideramos clave para garantizar el éxito posterior: *el inicio de la carrera*. Si se conocen con mayor precisión las relaciones entre estos predictores y el éxito en los estadios iniciales de la carrera, se podrán diseñar politicas e intervenciones adecuadas para mejorar la calidad de los procesos de selección por parte de las organizaciones y de los programas de orientación, formación y desarrollo para los titulados por parte de las intituciones educativas.

Este es el fin último pretendido con los trabajos que integran esta tesis doctoral. En los apartados siguientes, se explica como nos proponemos alcanzar esta meta, cuyo planteamiento de partida, que sirve de marco general para el desarrollo del presente trabajo, incluye como objeto de estudio los determinantes y correlatos de los resultados ocupacionales representados en gris oscuro en la figura que sigue (3).

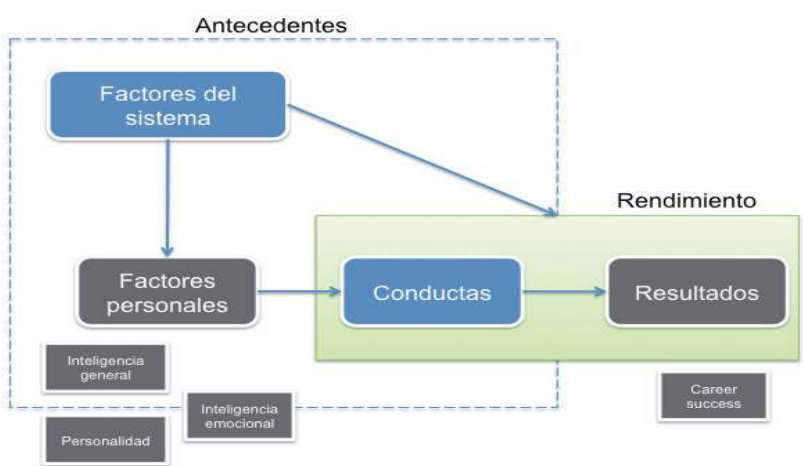

Figura 3. Marco general tomado como referencia para el presente estudio.

3. Metodología y plan de trabajo.

3.1. Objetivos e hipótesis de trabajo.

3.2. Materiales y método.

3. Metodología y plan de trabajo.

3.1. Objetivos e hipótesis de trabajo.

Este trabajo pretende realizar una aportación en la delimitación de las relaciones entre los predictores *inteligencia general, factores de personalidad e inteligencia emocional* y el éxito en la carrera profesional, en un momento determinante en el futuro de un profesional: *el inicio de su carrera*

Centrarnos en el análisis de indicadores de éxito en la carrera (extrínsecos e intrínsecos) en esta temprana etapa de la carrera, ha estado motivado por la escasez de investigación sobre predictores al inicio de la carrera (Rode y cols., 2008) y por la necesidad de probar criterios de éxito alternativos a los criterios de rendimiento (*job performance*) que han sido más ampliamente estudiados, como recomiendan Amelang y Steinmayr (2006).

El objetivo general de este conjunto de estudios, es *analizar la contribución de la inteligencia general, la personalidad y la inteligencia emocional a la predicción del éxito profesional en el inicio de la carrera profesional.*

Para ello, se formulan los siguientes *objetivos específicos*:

1. Verificar la relación entre *inteligencia general* y el éxito profesional al inicio de la carrera.

2. Analizar la relación entre los *factores de personalidad*, y el éxito profesional al inicio de la carrera.

3. Evaluar si la personalidad tiene validez incremental con respecto a la *inteligencia general* a la hora de predecir el éxito profesional al inicio de la carrera.

4. Comprobar si la relación entre personalidad y éxito profesional al inicio de la carrera está moderada por el nivel de inteligencia general.

5. Comprobar la relación entre las *dimensiones de la inteligencia emocional percibida* y el éxito profesional al inicio de la carrera.

6. Evaluar si la inteligencia emocional tiene validez incremental con respecto a la *inteligencia general* a la hora de predecir el éxito profesional al inicio de la carrera.

7. Evaluar si la inteligencia emocional tiene validez incremental, con respecto a la *inteligencia general* y la *personalidad* a la hora de predecir el éxito profesional al inicio de la carrera.

8. Comprobar si la relación entre personalidad y éxito profesional al inicio de la carrera está mediada por la inteligencia emocional percibida.

A partir de los anteriores objetivos, derivados del análisis de los principales resultados de las investigaciones referenciadas en la introducción, se plantean las siguientes *hipótesis*:

Hipótesis 1: La inteligencia general, contribuye significativamente a la predicción del éxito profesional extrínseco (salario y nivel del puesto) e intrínseco (satisfacción con la carrera).

Hipótesis 2: Las dimensiones de personalidad responsabilidad y extraversión están relacionadas positiva y significativamente con el éxito profesional al inicio de la carrera (salario y satisfacción con la carrera); las dimensiones de neuroticismo, amabilidad y apertura, lo están negativamente.

Hipótesis 3: La personalidad, hace una contribución significativa a la predicción del éxito profesional al inicio de la carrera (salario y satisfacción con la carrera), más allá de lo que lo hace la inteligencia general.

Hipótesis 4: Las relaciones entre ciertos factores de personalidad (responsabilidad, neuroticismo y apertura) y el éxito profesional al inicio de la carrera (salario y satisfacción con la carrera), están moderadas por el nivel de inteligencia general, de forma que existe un efecto de interacción entre ambos predictores.

Hipótesis 5: Las dimensiones de inteligencia emocional percibida (percepción, comprensión y regulación emocional), hacen una contribución significativa a la predicción del éxito profesional extrínseco (salario) e intrínseco (satisfacción con la carrera) .

Hipótesis 6: Las dimensiones de inteligencia emocional percibida (percepción, comprensión y regulación emocional), hacen una contribución significativa a la predicción del éxito profesional extrínseco (salario y nivel del puesto) más allá de lo que lo hace la inteligencia general.

Hipótesis 7: Las dimensiones de inteligencia emocional percibida (percepción, comprensión y regulación emocional), hacen una contribución significativa a la predicción del éxito profesional extrínseco (salario) e intrínseco (satisfacción con la carrera) más allá de lo que lo hace la inteligencia general y la personalidad.

Hipótesis 8: Las dimensiones de inteligencia emocional percibida (percepción, comprensión y regulación emocional), median en la relación entre factores de personalidad y criterios de éxito extrínseco (salario).

Este trabajo es de carácter predictivo, con *diseño ex post facto prospectivo complejo*. El análisis de los resultados, permitirá formular nuevas hipótesis que faciliten la explicación de los fenómenos que intervienen en los procesos de conexión causal preditor-criterio y así tener un mejor entendimiento (explicar) de lo que sucede.

3.2. Materiales y método.

a. Participantes.

Los estudios se realizaron sobre una muestra de 130 egresados universitarios (32% varones y 68% mujeres), con 23.4 años de edad promedio y desviación típica de 4.38. Esta muestra final, que formaba parte de una muestra original de 906 estudiantes de último curso pertenecientes a distintas titulaciones correspondía a los que contestaron estar trabajando, tres años después de haber sido evaluados por primera vez (2007/2008). La muestra inicial de 906 estudiantes fue seleccionada utilizando un sistema de muestreo aleatorio estratificado proporcional al número de alumnos matriculados en cada uno de los ámbitos científico-profesionales mencionados, cuya distribución porcentual por áreas de conocimiento fue: ámbitos científico-tecnológico (25.7%), ámbito socio-económico (18.9%), ámbito educativo (24.5%), ámbito bio-sanitario (15.9%) y humanidades (6.5%). La distribución por sexos de la muestra original (36% de varones y 64% de mujeres), así como la media de edad, representaban a la población universitaria de la Universidad de Alicante y no difería de la muestra final utilizada en este estudio.

b. Medidas.

Para la evaluación de las variables incluidas en los diferentes estudios que integran esta tesis, se utilizaron las medidas que se describen a continuación.

Inteligencia general.

Para la medición de la inteligencia general se utilizó la escala 3 del factor "g" de Cattell y Cattell (1994), adaptada a la población española por Cordero, De la Cruz y Seisdedos (1997). Dicha escala, de aplicación colectiva, está compuesta por cuatro subtests: *series, clasificación, matrices y condiciones* que permiten obtener un cociente intelectual (CI) que mide la inteligencia general de tipo fluido.

Personalidad.

Se utilizó la version española de 60 items del NEO-FFI para medir los factores de personalidad. Se trata de una medida de auto reporte sobre cinco dimensiones de perosnalidad: *Extraversion, Amabilidad, responsabilidad, neuroticismo y apertura*. Los participantes deben indicar para responder, su nivel de acuerdo con cada item en una escala Likert de 5 puntos donde 1 indica fuertemente en desacuerdo y 5 fuertemente de acuerdo.

Inteligencia emocional.

Dada la evidencia que demuestra que los estudios basados en modelo de IE que utilizan medidas de autoinforme, tienen un poder predictivo mayor que los estudios basados en modelos que han evaluado la IE con pruebas de habilidad (O'Boyle y cols., 2011;. Van Rooy y Viwesvaran, 2004), en este estudio se decidió utilizar una medida de autoinforme: la Escala de Trait Meta Mood Scale (TMMS).

El cuestionario empleado, fue el Trait-Mood Scale-24 (TMMS-24), que es una versión reducida y adaptada al castellano del Trait Meta-Mood Scale-48 (TMMS-48) por el grupo de investigación de Málaga (Fernández-Berrocal, Extremera y Ramos, 2004). Este instrumento, basado en el modelo de Salovey y Mayer (1990), es uno de los más utilizados, evaluando la *Inteligencia Emocional Percibida (IEP),* es decir el conocimiento que tienen los individuos sobre sus emociones más que su capacidad emocional.

Se compone por tres dimensiones: la atención percibida de los estados emocionales propios (TMMS atención), la capacidad percibida de entender y discriminar entre los estados de ánimo y emociones (TMMS claridad) y la capacidad percibida para regular los estados emocionales propios (TMMS control/repair). Para contestar, a los sujetos se les pide que evalúen el grado en el que están de acuerdo con cada uno de los ítems sobre una escala tipo Likert de 5 puntos (1 = Nada de acuerdo, 5 = Totalmente de acuerdo).

Criterios de éxito profesional.

El éxito en la carrera profesional es un criterio que, como hemos indicado en la introducción, cumple perfectamente con los requerimientos de un buen criterio. En este conjunto de trabajos, se utilizaron medidas de éxito extrinseco (salario y nivel del puesto) e intrínseco (satisfacción con la carrera), extraidas de un cuestionario específico diseñado utilizando como base las encuestas de inserción laboral desarrolladas en los estudios CHEERS (Schomburg & Teichler, 2003) y en el informe REFLEX (Agencia Nacional de Evaluación, Calidad y Acreditación, 2007), que recogen información detallada de aspectos como la carrera estudiada, la transición de los estudios al trabajo, el primer trabajo después de la carrera, la historia laboral, el trabajo actual y las competencias consideradas clave a la hora de acceder al mercado laboral.

El cuestionario de 43 preguntas, estaba estructurado en siete secciones que cubrían diversos aspectos relacionados con la formación recibida, transición al mundo laboral, competencias y satisfacción, entre otros. Más concretamente, el cuestionario incluía los siguientes apartados: A. Información personal; B. Estudios universitarios; C. Primer trabajo después de la graduación; D. Situación actual; F. Trabajo actual; G. Competencias y H. Otros datos.

La información sobre el *éxito extrínseco*, se obtuvo a partir de indicadores del nivel salarial y del nivel del puesto ocupado en el momento de la realización de la encuesta.

El *nivel salarial*, se midió mediante los ingresos mensuales brutos codificados en siete categorías (ítem 26 del cuestionario): menos de 600 euros (1); entre 600 y 1000 euros (2), entre 1000 y 1200 euros (3), entre 1200 y 1500 euros (4), entre 1500 y 1800 euros (5), entre 1800 y 2000 euros (6) y más de 2000 euros (7). Los puntos medios que se consideraron en cada categoría fueron los siguientes: 600, 800, 1100, 1350, 1650, 1900 y 2200 euros.

El *nivel del puesto*, se midió reagrupando las 28 ocupaciones incluidas en el ítem 23 del cuestionario en 5 categorías donde 1, incluía los puestos menos cualificados como "*peón agropecuario*" y 5, los puestos de mayor nivel, como "*director de empresa*".

La información sobre el *éxito intrínseco*, se obtuvo a partir de indicadores de la satisfacción con la carrera, a partir de la suma de las respuestas a los items 30, 37 y 39, del cuestionario de inserción laboral que mide el grado de satisfaccion con sus carreras en una escala de cinco puntos donde 1 indica bajo y 5 alto.

c. Procedimiento.

Se realizó una primera fase, cuando los estudiantes cursaban su último año de carrera (2007-2008), en la que se aplicaron, junto a otras pruebas y por este orden, el cuestionario TMMS-24 y la prueba de factor "g" de Cattell y Cattell a una muestra inicial de 906 sujetos. Tres años después del primer estudio, durante el curso 2010-2011, la muestra inicial quedó reducida a otra de 339 egresados, que fueron los que cumplimentaron un cuestionario diseñado para recabar información acerca de la situación profesional de los egresados y su acceso al mundo laboral. Este cuestionario, cuya cumplimentación no llevaba más de 30 minutos, fue realizado por vía electrónica en un plazo máximo de 3 meses desde su envío. La muestra de este estudio estuvo compuesta por los 130 egresados que afirmaron estar trabajando cuando respondieron al cuestionario.

2. Desarrollo.

5.1. Artículos incluidos.

5.2. Resultados globales y discusión

5.3. Conclusiones.

5.1. Artículos incluidos.

De Haro, J. M., & Castejón, J. L., (en prensa). **Perceived emotional intelligence, general intelligence and early professional success: predictive and incremental validity.** *Annals of Psychology*. Artículo aceptado en proceso de publicación.

De Haro, J. M., & Castejón, J. L., (en prensa). **Does trait emotional intelligence predict unique variance in early career success beyond IQ and personality?.** *Journal of Career Assessment*. Artículo aceptado en proceso de publicación. Published online before print December 11, 2013 DOI 10.1177/1069072713515971.

De Haro, J. M., Castejón, J. L., & Gilar, R., (2013). **General mental ability as moderator of personality traits as predictors of early career success.** *Journal of Vocational Behavior*, 83*(2),* 171-180. DOI 10.1016/j.jvb.2013.04.001

1. De Haro, J. M., & Castejón, J. L (en prensa). Perceived emotional intelligence, general intelligence and early professional success: predictive and incremental validity. ***Annals of Psychology.*** Artículo aceptado en proceso de publicación.

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- PSICODOC (Col. Ofic. Psicólogos, España).
- Anuario de Psicología Clínica producida en lengua española (Madrid),
- Ulrich's International Periodicals Directory
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Autores: José Manuel De Haro García, Juan Luis Castejón

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Fdo.: Agustín Romero Medina

Inteligencia emocional percibida, inteligencia general y éxito profesional en el inicio de la carrera: validez predictiva e incremental

Resumen
Aunque en el estudio de los factores que afectan al éxito profesional, se han establecido conexiones entre aspectos biográficos y otros relacionados con la capacidad, los conocimientos o la personalidad, no abundan trabajos que demuestren la relación entre la inteligencia emocional y las dimensiones de éxito profesional al inicio de la carrera profesional. Cuando estos se han realizado, los resultados han mostrado relaciones significativas entre las dimensiones de la inteligencia emocional e indicadores de éxito profesional (como el salario o el nivel del puesto). En el presente trabajo, se analizan las relaciones entre la inteligencia emocional percibida, medida mediante el cuestionario Trait Meta-Mood Scale (MMS-24), la inteligencia general, evaluada mediante prueba de factor "g" de Cattell, escala 3, e indicadores extrínsecos de éxito profesional, en una muestra de 130 egresados universitarios que se encuentran en el inicio de su carrera profesional. Los resultados obtenidos en el análisis de regresión jerárquica, indican que la inteligencia emocional realiza una contribución específica y significativa a la predicción del salario, una vez controlado el efecto de la inteligencia general. Las dimensiones de la inteligencia emocional percibida TMMS control y TMMS atención, junto con el sexo, muestran una relación mayor con el éxito profesional y realizan una mayor contribución a la predicción del mismo que la inteligencia general. Se discuten las implicaciones de estos resultados para la formación futura en competencias socioemocionales a los titulados universitarios.
Palabras clave: Inteligencia emocional percibida; inteligencia general; éxito profesional; salario.

Perceived emotional intelligence, general intelligence and early professional success: predictive and incremental validity.

Abstract
Although the study of factors affecting career success has shown connections between biographical and other aspects related to ability, knowledge and personality, few studies have examined the relationship between emotional intelligence and professional success at the initial career stage. When these studies were carried out, the results showed significant relationships between the dimensions of emotional intelligence (emotional self-awareness, self-regulation, social awareness or social skills) and the level of professional competence. In this paper, we analyze the relationship between perceived emotional intelligence, measured by the Trait Meta-Mood Scale (TMMS-24) questionnaire, general intelligence assessed by the Cattell factor "g" test, scale 3, and extrinsic indicators of career success, in a sample of 130 graduates at the beginning of their careers. Results from hierarchical regression analysis indicate that emotional intelligence makes a specific contribution to the prediction of salary, after controlling the general intelligence effect. The perceived emotional intelligence dimensions of TMMS repair, TMMS attention and sex show a higher correlation and make a greater contribution to professional success than general intelligence. The implications of these results for the development of socio-emotional skills among University graduates are discussed.
Keywords: self-reported emotional intelligence; general intelligence; career success; salary.

Introduction

The literature shows that intelligence tests are valid predictors for success at work, meaning that mental ability is not only the best predictor of high performance in most work situations (Schmidt & Hunter, 2004), but also a stable predictor over time with indicators of success and occupational prestige (Judge, Klinger & Simon, 2010), especially in work of a more complex nature (Gottfredson, 2003).

However, few studies have analyzed the link between mental ability and career success (Judge et al., 2010). When these studies have been performed, positive relations have been found between general intelligence and extrinsic career success (Judge, Higgins, Thoreson & Barrick, 1999), while in others the relations found have only been moderate (Ng, Eby, Sorensen & Feldman, 2005).

Meanwhile, the importance of another type of variable has been proven in studies that have attempted to identify the personal factors or socioemotional skills critical for career success (Ariza, 2001; Boudreau, Boswell & Judge, 2001; Cherniss, 2001). The relationships between factors such as locus of control, self-control, self-esteem, optimism, Machiavellianism and career success (Lau & Schaffer, 1999), occupational prestige and income, (Kammeyer-Mueller, Judge & Piccolo, 2008) have thereby been highlighted.

Of the variables that have shown positive relations with criteria for career success, the personality variables based on the Five Factor Model have accounted for much of the research in both traditional studies and in meta-analytical studies in the United States (Ng et al., 2005) and in the European community (Salgado, 1998). The predominant conclusions in this group of studies suggest that responsibility, extraversion and emotional stability are positively related with performance at work, remuneration and higher professional status, while neuroticism is negatively related with these criteria (Barrick & Mount, 1991; Gelissen & De Graaf, 2006).

Besides personality factors, there is now a considerable body of research suggesting that emotional intelligence (EI) provides the basis for social and emotional skills that are important for success in almost any job (Boyatzis, Goleman & Rhee, 2000; Derksen, Kramer & Katzko, 2002; Dulewicz & Higgs, 1998; Guillén, Saris & Boyaztis, 2009; Goleman, 1998; Law, Wong, & Song, 2004; Sala & Dwight, 2002; Spencer & Spencer, 1993).

The ways of conceptualizing this construct have been grouped into two main models: ability-related models (Mayer, Salovey & Caruso, 2000) and mixed models (Bar-On, 1997; Goleman, 1998). The former define EI as a type of intelligence, and as a set of skills for processing emotional information and managing the emotions (Mayer & Salovey, 1997). The latter combine cognitive skills with interpersonal skills, social skills and other dispositional factors (Boyatzis et al., 2000). Another distinction based more on the type of measure than on the theoretical model has also been established between EI models of information processing and trait EI models (Petrides & Furnham, 2000).

These alternative ways of understanding EI play different roles in its relationship with performance at work, and in turn determine the type of assessment instrument used, which are basically related to skills or self-reporting. As a result, the measures of maximum performance with correct and incorrect answers (e.g. the Mayor Salovey Caruso Emotional Intelligence Test (MSCEIT); Mayer et al., 2000) are based on models of ability and on information processing models. The self-report models are

also divided into two categories. The first includes those based on the skills model of Salovey and Mayer (1990), which assess individuals' perceptions of their emotional skills (e.g. the Trait Meta-Mood Scale (TMMS); Salovey, Mayer, Goldman, Turvey and Palfai, 1995); The second includes those focusing on non-cognitive factors such as social skills, self-esteem and personality dimensions (e.g. the Emotional Quotient Inventory (EQ-i); Bar-On, 1997; the Trait Emotional Intelligence Questionnaire – Trique; Petrides, Pita & Kokkinaki, 2007).

The importance of this construct has been analyzed in numerous studies that have shown its predictive ability as regards various criteria for both academic and career success (Brackett & Mayer, 2003; Côté & Miners, 2006; Brackett, Rivers & Salovey, 2011; Dulewicz, Higgs & Slaski, 2003; Fox & Spector, 2000; Gardner & Qualter, 2010; Goleman, 1998; Lam & Kirby, 2002; Lopes, Grewal, Kadis, Gall & Salovey, 2006; Lyons & Schneider, 2005; Mayer et al., 2000; Sevinc, 2001; Van der Zee, Thijs & Schakel, 2002; Van Rooy & Viswesvaran, 2004).

These positive results have been obtained in both studies based on skills models (Daus & Ashkanasy, 2005; Lopes, Brackett, Nezlek, Schutz, Sellin & Salovey, 2004; Lopes et al., 2006; Rossen & Kranzler, 2009), and in studies based on mixed emotional intelligence models (Bar-On, Handley & Fund, 2005; Boyatzis et al., 2000; Epstein, 2003; Goleman, 1998; Sevinc, 2001). Their predictive nature can also be applied to other criteria such as managerial effectiveness (Boyatzis, Good & Massa, 2012; Harms & Credé, 2010; Rosete & Ciarrochi, 2005; Semadar, Robins & Ferris, 2006; Wong & Law, 2002) and job satisfaction (Carmeli, 2003).

In addition to these results, some findings have shown the incremental validity of emotional intelligence on general intelligence and personality factors when predicting outcomes at work, and both extrinsic and intrinsic indicators of career success (Bastian, Burns & Nettelbeck, 2005; Burns, Bastian & Nettelbeck, 2007; Iliescu, Ilie, Ispas & Ion, 2012; Lam & Kirby, 2002; Law, Wong, Huang & Li, 2008; Lyons & Schneider, 2005; O'Boyle, Humphrey, Pollack, Hawver & Story, 2011; Rode, Mooney, Arthaud-Day, Near, Baldwin, Rubin & Bommer, 2007; Van der Zee & Wabeke, 2004).

However, the effects of emotional intelligence on success do not seem to have a clear, simple and direct influence. Furthermore, some findings have led some writers to conclude that EI does not provide incremental validity for the prediction of professional performance or success to any greater extent than general intelligence and personality (Amelang & Steinmayer, 2006; Antonakis, 2004; Barchard, 2003; Byrne, Dominick, Smither & Reilly, 2007; Coté & Miners, 2006; García-Izquierdo, García-Izquierdo & Ramos-Villagrasa, 2007; Joseph & Newman, 2010; Landy, 2005; Newsome, Day & Catano, 2000; Rode, Arthaud-Day, Mooney, Near, & Baldwin, 2008; Schulte, Ree & Carretta, 2004).

We conducted this study in order to compare the ability of emotional intelligence to that of general intelligence for predicting career success. To that end, we used one of the most extensively used reporting methods, based on the model of Salovey and Mayer (1990), the TMMS, which evaluates what is known to researchers as Perceived Emotional Intelligence (PEI), i.e. the knowledge that individuals have about their emotions rather than their emotional capacity. Sex and age were included as control variables, as data that link the former with salary were found (Ng, Eby, Sorensen & Feldman, 2005; Rode et al., 2008).

As regards the criteria, we focused on career success, defined as the set of psychological and work-related results derived from experience at work (Seibert, Crant & Kraimer, 1999). Two measures of success are usually considered: extrinsic, based on objective indicators such as salary, and intrinsic, based on subjective indicators such as career satisfaction (Judge, Cable, Boudreau & Bretz, 1995). Even when both types of criteria are important and reflect measures that are related but independent, for the purposes of this study we have only included extrinsic indicators of success: salary and job level. There are several reasons for this decision. First, salary has been the most extensively used measure of career success in the research (Judge et al., 2010) and is the most easily accessible (Hall, 2002). Second, the fact that it is observable, highly visible and objective (Jaskolka, Beyer & Trice, 1985) makes it less susceptible to the errors derived from the greater susceptibility to subjective parameters (Ng et al. 2005) to which to self-reported measures are subject (Heslin, 2005). Finally, we considered that in order to evaluate intrinsic success indicators such as career satisfaction, a longer period of professional experience than that presented by the individuals in this study is required. The fact that this study focuses more on incremental validity at a specific point in time at the beginning of the career, rather than on its evolution, as well as the greater wealth of the results derived from the increased differentiation between extrinsic success criteria, compared to the self-reporting measures used as independent variables, was also significant in our decision not to include intrinsic criteria.

Based on the above, the hypothesis we consider in this study is: the dimensions of perceived emotional intelligence (perception, understanding and emotional self-regulation) make a significant contribution to the prediction/explanation of extrinsic career success (salary and job level) beyond the contribution made by general intelligence (IQ).

Method

Participants

The study was conducted on a sample of 130 university graduates (32% male and 68% female), with a mean age of 23.4 years old and a standard deviation of 4.38. This sample in turn originated from an original sample of 906 final year students (2007/2008) taking various courses in the areas of science and technology (25.7%), socio-economics (18.9%), education (24.5%), bio-health (15.9%) and humanities (6.5%), registered at the University of Alicante, Spain. Three years earlier, they had participated in a more extensive study for which they had been selected by means of a stratified random sampling system proportional to the number of students registered in each of the scientific-professional areas mentioned above. The gender distribution of the original sample (36% men and 64% women), and the mean age represented the student population of the University of Alicante and did not differ from the final sample used in this study.

Instruments

To measure general intelligence, we used the factor "g" test, scale 3 of Cattell & Cattell (1994), adapted to the Spanish population by Cordero, De la Cruz and Seisdedos (1997). This collectively applied scale consists of four subtests: series, classification, matrices and conditions that enable an intelligence quotient (IQ) which measures fluid general intelligence to be obtained. The reliability, obtained by the two-halves method, was .78 in the validation sample.

Perceived emotional intelligence was evaluated by the Trait-Mood Scale-24 (TMMS-24), which is a reduced version of the Trait Meta-Mood Scale-48 (TMMS-48) adapted to Spanish by the Malaga research group (Fernández-Berrocal, Extremera & Ramos, 2004). As in the original version, it is based on the formulation of Salovey and Mayer, and measures the skills with which we can be aware of our own emotions and the ability to regulate them. It consists of three dimensions: emotional perception (TMMS attention), understanding of feelings (TMMS clarity) and emotional self-regulation (TMMS control). The subjects were asked to assess the degree to which they agreed with each of the items on a 5-point Likert scale (1 = Strongly disagree, 5 = Strongly agree). The factors were refined and some items on the scale were eliminated for various reasons, which increased its reliability in all its factors: attention (.90), clarity (.90) and repair (86). It also presents an adequate test-retest reliability (Fernández-Berrocal, et al. 2004).

We used the items for salary, occupational level and satisfaction from a specific questionnaire designed based on the employment placement surveys used for the CHEERS studies (Schomburg & Teichler, 2006) and the REFLEX report (National Agency for Evaluation and Accreditation, 2007) to assess occupational success. These include detailed information on aspects such as the degree course studied, the transition from education to work, the first job after the degree, employment history, the current job and the skills considered essential when entering the job market. The questionnaire, which contained 43 questions, was structured in 7 sections covering various aspects of the education received, the transition to the labour market, skills and satisfaction, among others. More specifically, the questionnaire includes the following sections: A. Personal information; B. University education; C. First job after graduation; D. Current situation; F. Current job; G. Skills and H. Other data.

The criteria for extrinsic success were obtained from the salary level and the level of the job held at the time the survey was performed. The salary level was measured by gross monthly income coded into seven categories (item 26 of the questionnaire): less than 600 euros (1); between 600 and 1,000 euros (2), between 1,000 and 1,200 euros (3), between 1,200 and 1,500 euros (4), between 1,500 and 1,800 euros (5), between 1,800 and 2,000 euros (6) and more than 2,000 euros (7). The midpoints considered in each category were as follows: 600, 800, 1,100, 1,350, 1,650, 1,900 and 2,200 euros. The job level was measured by regrouping the 28 occupations included in item 23 of the questionnaire into 5 categories, where 1 included less skilled positions such as "agricultural labourer" and 5 included higher level positions such as "company director".

Procedure

In the first phase, which was conducted when the students were taking the final year of their degree, together with other tests and in this order, we applied the TMMS-24 questionnaire and Cattell and Cattell's factor "g" test to an initial sample of 906 subjects. Three years after the first study, during the 2010-11 academic year, the initial sample was reduced to a sample of 339 graduates, who completed a questionnaire designed to gather information on the employment status of the graduates and their access to the labour market. This questionnaire, which took no more than 30 minutes to complete, was completed electronically within three months of the date it was set. The study sample was composed of 130 graduates who said they were working when they answered the questionnaire.

Design and data analysis

This is a predictive correlational design, in which the hierarchical regression procedure is used as an analysis technique, and salary and job level used as criteria to examine the specific contributions of emotional intelligence, notwithstanding the contributions made by general intelligence. Descriptive and comparison analyses of the means between sexes were also carried out. The data analysis was performed using version 20 of the SPSS package.

Results

Table 1 shows the descriptive analyses of each variable in the total sample and by sex. It also shows the differences in the means between sexes in each variable included in the study, when the sample is not composed of the same percentage of men and women. As can be seen, the values in all the variables are very similar, although for salary, men earn slightly more than women, and the same is true of the relative score for job level. The *t* test results for the difference of means for independent samples show that there are only significant differences in favour of men in age and job level. There are no significant differences in salaries, general intelligence or any of the aspects of the PEI. Levene's test also shows the existence of homogeneity in the variances between men and women in all the variables.

Table 1. *Descriptive statistics and mean differences by sex.*

	Sex	*M*	*SD*	*t*	*p*
IQ	Men	102.09	16.85	-.10	.92
	Women	102.43	15.03		
	Total	102.31	15.25		
TMMS attention	Men	25.94	5.56	-.18	.85
	Women	26.16	5.76		
	Total	26.34	5.63		
TMMS clarity	Men	26.52	6.43	.03	.98
	Women	26.48	5.48		
	Total	26.47	5.74		
TMMS control	Men	27.77	6.11	-.75	.46
	Women	28.76	6.04		
	Total	28.53	6.08		
Age	Men	23.87	3.78	2.27	.02*
	Women	22.37	2.63		
	Total	22.86	2.94		
Salary	Men	1469.35	555.97	1.22	.23
	Women	1327.62	526.65		
	Total	1372.51	537.54		
Job level	Men	3.51	.85	2.27	.02*
	Women	3.07	.91		
	Total	3.21	.90		

* = $p < .05$ (Sig. 2-tailed)

Table 2 presents the correlation coefficients for examining the association between the dimensions of general intelligence, perceived emotional intelligence (TMMS Attention, TMMS clarity, TMMS control) and extrinsic career success measures (salary and job level).

Table 2. *Correlation matrix between variables.*

	1	2	3	4	5	6
1. IQ	1					
2. TMMS attention	.09	1				
3. TMMS clarity	.07	.26**	1			
4. TMMS control	.11	.14	.52**	1		
5. Salary	.01	-.09	.26*	.27**	1	
6. Job level	.02	-.17	.09	.13	.25*	1

** Correlation is significant at the .01 level (2-tailed). * Correlation is significant at the .05 level (2-tailed).

The results in Table 2 show that the IQ showed no significant relationship with any of the extrinsic career success criteria, and that the dimensions of perceived emotional intelligence, TMMS Control (.27) and TMMS clarity (.26), correlated with salary positively and significantly. None of them is significantly related to job level.

No significant relationships between the dimensions of perceived emotional intelligence and IQ were observed. As regards the relationship of the dimensions of PEI, significant correlations were observed between TMMS clarity and TMMS control (.52) and between TMMS clarity and TMMS attention (26). Finally, the two criteria used, salary and job level, were also significantly related (.25).

We conducted a hierarchical regression analysis to examine the incremental prediction of the dimensions PEI on IQ for the two criteria. For each regression model, the criteria of career success, salary and occupational level were the dependent variables, and IQ and the dimensions of PEI were the independent variables, including sex in a first step, coded as male = 1 and female = 2 and age as covariates (Cohen & Cohen, 1983); IQ was included in step 2 and the dimensions of PEI in step 3.

As shown in Tables 3 and 4, the models explained 14% of the variance for salary (R = 0.37, R^2 = 0.14; F(3.95)=4.31, p<0.01) and 11% for job level (R = 0.34, R^2= 0.11; F(3.95) = 2.08, p < 0.10).

Table 3. *Results of the hierarchical regression analysis of salary at the start of the career.*

	R	R^2	R^2 corrected	β	ΔR^2	F	Sig. F. Change	t
Step 1: Covariant	.13	.02	.03		.02	.85	.43	
Sex				-.13				-1.29
Age				-.05				-.47
Step 2: General mental ability	.13	.02	.01		.00	.56	.92	
Sex				-.13				-1.28
Age				-.05				-.45
IQ				.01				.11
Step 3: Perceived Emotional Intelligence	.37	.14	.08		.12 **	2.47	.00	
Sex				-.15				-1.49
Age				-.06				-.60
IQ				-.01				-.11

TMMS attention		-.18	-1.73
TMMS clarity		.19	1.65
TMMS control		.20*	1.97
R^2 total	.14		

N.B.: N =103. *p<.05 **p<.01

For salary, the dimensions of PEI added 12% of the explained variance. Meanwhile, the increase in the variance explained by the dimensions of PEI were not statistically significant for job level. The individual variable that showed the greatest relationship with salary is TMMS control, whereas the variables that were negatively and significantly related to job level were sex and TMMS attention.

Salary was clearly significantly associated with the dimension of perceived emotional intelligence, TMMS Control (β= .20; p<.05), and job level was significantly related due to the dimension of perceived emotional intelligence, TMMS attention (β= -.21; p< .05) and due to sex (β= - .24; p< .05).

Table 4. *Results of the hierarchical regression analysis on job level at the start of the career.*

	R	R^2	R^2 corrected	β	ΔR^2	F	Sig. F. Change	t
Step 1: Covariant	.23	.05	.03		.05	2.60	.08	
Sex				-.23*				-2.27
Age				-.03				-.25
Step 2: General mental ability	.23	.05	.02		.00	1.74	.82	
Sex				-.23*				-2.25
Age				-.25				-.23
IQ				.02				.23
Step 3: Perceived emotional intelligence	.34	.11	.05		.06	1.93	.11	
Sex				-.24*				-2.40
Age				-.05				-.48
IQ				.02				.19
TMMS attention				-.21*				-2.03
TMMS clarity				.07				.57
TMMS control				.14				1.18
R^2 total		.11						

N.B.: N =103. *p<.05 **p<.01

Discussion

Few studies have analyzed the predictors of career success at the start of the career. In this study, we aimed to test whether two of them, general mental ability, as measured by IQ, and the dimensions of Perceived Emotional Intelligence, which are usually included in other studies with samples with greater professional experience, would also predict career success in the early stages of the career. More specifically, we sought to ascertain whether PEI makes a specific contribution to the prediction of extrinsic career success beyond contribution made by general intelligence. We used two types of extrinsic criteria (salary and occupational level), and found that the starting salary was positively predicted by PEI and more specifically by the TMMS control dimension of PEI; however, the dimensions of PEI fail to make a significant contribution in the case of job level, although the job level was predicted negatively by sex and by the TMMS attention dimension of PEI.

The results show that beyond general intelligence, emotional intelligence contributes to the level of salary received, while this contribution is not significant in the professional level achieved. The results also show that professionals with higher levels of emotional self-regulation (TMMS control) achieve higher incomes and those with lower levels of attention to their own emotions (TMMS attention) achieve a higher occupational level.

Although our hypothesis has only been partially confirmed, it therefore supports the studies that have found incremental validity for emotional intelligence on cognitive skills (Law et al., 2008). Furthermore, although some studies have shown a positive relationship between general intelligence and career success (Dreher & Bretz, 1991; Judge, et al., 1999; O'Reilly & Chatman, 1994), the results of this study are closer to those found in other studies that did not show a relationship between the two constructs (Rode et al., 2008) or only a moderate (Ng et al., 2005) or negative relationship (Ganzach, 1998).

The lack of a contribution by general intelligence to the prediction of the criteria could be due to the type of sample (university graduates who are assumed to have a high IQ), the interaction between IQ and emotional intelligence (O'Reilly & Chatman, 1994), so that the correlation between the variables and the criteria varies according to the level of intelligence (Cote & Miners, 2006), to the distal nature of IQ compared to emotional intelligence in determining success (Spurk & Abele, 2011), or the type of criteria on which the prediction equations are projected (extrinsic career success versus job performance).

The greatest predictive power of emotional intelligence on general intelligence is possibly located in the unique requirements associated with the responsibilities of the jobs. Positive performance at work depends in many cases on the support, advice and resources provided by others (Seibert, Kraimer & Liden, 2001). In order to obtain this help, it is essential to have certain socio-emotional skills that contribute to job performance, enabling individuals to regulate their emotions in order to deal with stress effectively, work well under pressure, adapt to organizational change, achieve better relations at work, work better within a team and build social capital (Lopes et al., 2006).

Furthermore, the lack of a correlation obtained in this study between general intelligence and emotional intelligence is consistent with the results obtained in other studies (Davies, Stankov & Roberts, 1998; Derksen, et al., 2002, Fox & Spector, 2000) and reinforces the differential validity of emotional intelligence.

This study also shows that the predictors of salary and job level are different - TMMS control for the former and TMMS attention and sex for the latter.

With regard to salary, our results reinforce the importance of emotional regulation. The dimension of TMMS control, involving aspects such as "*having an optimistic outlook, thinking about pleasant things, having positive thoughts or making sure of being in a good mood*", is related to the salary level achieved. The importance of this dimension of EI has been demonstrated with other criteria such as performance at work (Law et al., 2004), entrepreneurial self-efficacy (Salvador, 2008) and life satisfaction (Extremera & Berrocal, 2005). Studies that have used other measures of emotional intelligence like the MSCEIT (Lopes et al. 2004; Lopes, et al. 2006, Sevinc, 2001), also present significant correlations between the dimension of emotion management and salary level.

As for job level, the existence of significant negative relationships between it and the perceived emotional intelligence dimension of TMMS attention, described by items such as "*I pay attention to my feelings"* could be explained by the negative impact of excessive attention to one's emotions on overall performance, and therefore on the promotions received.

Sex is also a predictor of job level, with a negative sign, indicating that men reach higher level positions than women at the start of their career. Similar results were found by Rode et al. (2008), for salary. Replication of these results in other studies might among other things reveal some degree of preference for males in recruitment for high-level positions, which could have significant implications for regulations on gender equality. Interestingly, this gender gap is absent in the case of salary levels. The fact that there are only differences between men and women in job level but not in salary or any of the variables related to PEI, except age, suggests that the explanatory variables of the gender effect fall outside the variables included in the study, and therefore the fact that there are more women than men in the study did not influence the results.

Finally, the third dimension of PEI, TMMS clarity, described by indicators such as "*having clear feelings, being able to define them, knowing how one feels and understanding emotions*" does not contribute to obtaining with higher salaries or with a higher professional level at the start of the career.

While acknowledging the practical implications of these results, such as acting as a basis for the development of training activities in social-emotional skills aimed at college students, further empirical evidence to support these findings must be provided, since the significant relationship between the variables considered in this study has not always been apparent (Barchard, 2003; Brackett & Mayer, 2003; Davies, et al. 1998; Sternberg, 2001; Zeidner, Matthews & Roberts, 2003), and neither has the predictive ability of perceived emotional intelligence (Rode, et al. 2008).

When evaluating the results, it is important to consider the strengths and limitations. A first limitation of the study is the specification of the model. Although this study does not test a comprehensive model of the variables related to career success, but rather a model that analyzes the influence of the dimensions of PEI in predicting career success, if relevant variables in this case such as personality are omitted after controlling for the effect of general intelligence, the model may have a specification error which affects the results.

A second limitation of this study is related to the sample size. This study may have lacked sufficient power to corroborate the statistical significance of the relationships that would have been found if a larger sample had been used.

A third limitation, also derived from the sample size, may be the difficulty in disaggregating subsamples by qualification in order to ascertain the possible differential behaviour of the variables studied in different qualifications.

On the other hand, one of the strengths of the study is that it is based on longitudinal data from the same sample of graduates who are working and who were monitored from their university studies until their employment, three years after completing those studies, which enables causal inferences to be made to a great extent.

In order to establish the links between emotional intelligence and career success more precisely, we must take into account the emotional intelligence model on which the type of measure used is based, the inclusion of other variables such as personality as well as overall intelligence, the consideration of possible mediating variables, the separation of independent variables depending on whether they are proximal or distal, and the use of other homogeneous criteria for success.

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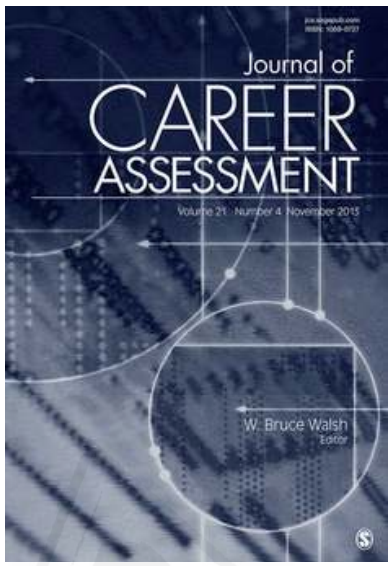

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Does Trait Emotional Intelligence Predict Unique Variance in Early Career Success Beyond IQ and Personality?

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Abstract
In order to determine the contribution of emotional intelligence (EI) to career success, in this study, we analyzed the relationship between trait EI (TEI), general mental ability (GMA), the big five personality traits, and career success indicators, in a sample of 130 graduates who were in the early stages of their careers. Results from hierarchical regression analyses indicated that TEI, and especially its dimension "repair," has incremental validity in predicting one of the career success indicators (salary) after controlling for GMA and personality. These findings provide support for the use of TEI measures as predictors of career success in the early stage.

Keywords
trait emotional intelligence, personality, IQ, career success

Introduction

The predictive capacity of emotional intelligence (EI) has been amply demonstrated with different job performance, professional success or job satisfaction criteria (e.g., Brackett, Rivers, & Salovey, 2011; Carmeli, 2003; Lopes, Grewal, Kadis, Gall, & Salovey, 2006; Van Rooy & Viswesvaran, 2004), both in studies based on ability models of EI (Daus & Ashkanasy, 2005) and in studies based on Trait EI (TEI; Bar-On, Handley, & Fund, 2006) and mixed models of EI (Boyatzis, Goleman, & Rhee, 2000).

There are also findings that show incremental validity of EI over general mental ability (GMA) and personality traits in predicting work outcomes or indicators of professional success (e.g., Iliescu,

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Ilie, Ispas, & Ion, 2012; Lyons & Schneider, 2005; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011).

However, other findings have led some authors to conclude that EI measures fail to add incrementally to the prediction of work outcomes or extrinsic and intrinsic indicators of professional success above and beyond established measures of cognitive intelligence and personality (e.g., Amelang & Steinmayer, 2006; Bastian, Burns, & Nettelbeck, 2005).

The disparity in the results obtained in different studies attempting to determine the predictive power of EI over variables such as IQ and personality traits, and thus respond with any certainty to the question of whether EI predicts significant and unique variance in job performance or career success, has in part been due to factors such as the EI Measures, EI dimensions, scoring methods, criteria, or types of sample used (Van Rooy & Viswesvaran, 2004).

This inconsistency in the results is perhaps most evident when different types of EI measures have been used. As the meta-analysis conducted by O'Boyle, Humphrey, Pollack, Hawver, and Story (2011) demonstrated, the incremental validity of EI depends on the type of measure used, differentiating three streams: (1) ability-based models that use objective test items; (2) self-report or peer-report measures based on the four-branch model of EI; and (3) ''mixed models'' of emotional competences. While it is to be expected that different measures will yield different results, it is striking that these differences occur when the same measure has been used. Thus, for example, in the case of using ability-based EI measures, some authors have found positive and significant relationships between EI and job performance measures (Iliescu et al., 2012; Lyons & Schneider, 2005) while others have reported the opposite (Amelang & Steinmayer, 2006; Joseph & Newman, 2010).

With respect to the other factors, these have also contributed to a greater or lesser extent to this wide variability in the results obtained, a phenomenon that has greatly impeded their generalization. In the case of the *dimensions of EI*, the validity of EI for predicting various criteria differs according to the dimension of EI analyzed. Its validity also differs according to the *scoring method* used (i.e., expert ratings vs. self-reports, or consensus scored self-reports vs. expert scored self-reports).

The most important differences as regards the criteria are between the results obtained using job performance as the criterion and those obtained using indicators of career success as the criteria. In the latter case, the results are not as positive as in the former, indicating that these are different aspects of professional success. Another contrast occurs between life skills criteria and achievement criteria. As Amelang and Steinmayr (2006) reported, recent studies have shown that EI has an incremental validity regarding life outcome criteria, but inconsistent results have been found for achievement criteria.

Finally, the type of sample used has also produced disparate results, so that in some cases the use of different samples (students vs. workers) has not yielded any significant results, for example, in the study by Amelang and Steinmayr (2006), where EI could not explain any variance in the criteria beyond psychometric intelligence and conscientiousness. In other cases, the variability of the results and their interpretation can be attributed to the type of sample, as for example in the study by Bastian, Burns, and Nettelbeck (2005), who argued that it was also possible that the markedly uniform sample assessed (primarily university students) affected the results.

In summary, as noted by Antonakis (2004), contradictions and inconsistencies highlight the importance of using methodologically defensible scientific criteria for conducting or evaluating research. Therefore, given that the results on the incremental validity of EI are ambiguous and require further research, it is necessary to continue seeking more data (Amelang & Steinmay, 2006).

The present study was designed in response to this need. We wished to determine whether EI had incremental validity above and beyond well-known general mental abilities and personality traits in predicting career success in the early stage. Our focus on these criteria in the early career stage was motivated by the paucity of research on this stage of a professional career (Rode, Arthaud-Day, Mooney, Near, & Baldwin, 2008) and the importance of including other success criteria beyond the

traditional one of job performance, if we were to investigate the relationship between EI and job performance across different type of jobs, as indicated by Amelang and Steinmayr (2006).

Selection of the EI instrument was based on the differentiation established by Petrides, Pita, and Kokkinaki (2007) between trait EI and ability EI, which refers more to the type of measurement rather than the theoretical approach.

Given the evidence demonstrating that EI studies based on self-report measures have a higher predictive power than studies that have assessed EI using EI ability tests (O'Boyle et al., 2011; Van Rooy & Viwesvaran, 2004), in this study, it was decided to use a self-report measure: the Trait Meta-Mood Scale (TMMS). This scale, based on Salovey and Mayer's model (1990), is one of the most valid and widely used self-report measures developed to assess relevant aspects of individuals' perceptions of their emotional competences. Unlike ability-based measures, TMMS evaluates the knowledge individuals have about their own emotional abilities rather than their actual capacity. Specifically, it is a measure of three key EI dimensions: attention (perceived attention paid to one's own emotional states), clarity (perceived ability to understand and discriminate between moods and emotions), and repair (perceived ability to regulate one's own emotional states).

Several studies have shown that TMMS EI dimensions, such as ''clarity'' and repair, are important predictors and have incremental validity over intelligence and personality for criteria such as life satisfaction (e.g., Extremera & Fernández-Berrocal, 2005; Palmer, Donaldson, & Stough, 2002; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995).

To determine whether TEI predicts early career success after controlling for the influence of cognitive abilities and personality, we proposed the following hypotheses:

Hypothesis 1: Self-report measures of TEI will show significant effects after controlling for the effects of GMA and personality and will significantly predict career success (salary and career satisfaction) in the early stage.

Hypothesis 2: Of the TEI dimensions assessed, TMMS repair and TMMS clarity will be positively associated with career success and will predict most of the variance in career success when IQ and personality traits are controlled statistically.

Method

Participants

The study was conducted on a sample of 130 university graduates who were in employment at the time of the study. Of these, 64% were women and 36% men, with a mean age of 26.4 years (standard deviation [*SD*] = 4.38). These percentages are similar to the sex distribution of the student population at this university. The sample consisted of graduates participating in a survey conducted of 339 university graduates from the University of Alicante (Spain) 3 years after completion of their studies. These 339 students had participated 3 years earlier in a study that assessed their personal and socioemotional competences, having been selected through a stratified random sampling system proportional to the number of students enrolled in each of the fields of science and technology (25.7%), social sciences (18.9%), education (24.5%), biohealth (15.9%), and humanities (6.5%).

Measures

Test of "g," Scale 3. To measure GMA, we used the test of ''g,'' Scale 3 by Cattell and Cattell (1994; adapted to Spanish by Cordero, De la Cruz, González, & Seisdedos, 1997). Cattell's test of *g* is one of the most widely used intelligence tests. This collectively applied scale consists of four subtests that assess fluid intelligence: series, classification, matrices, and conditions, enabling us to obtain

the IQ of the sample. Split-half reliability in the validation sample was .78. The internal consistency coefficient, Cronbach's α, was .83, obtained in the initial sample ($n = 339$) used in this study.

Big Five Inventory (NEO Five Factor Inventory [NEO-FFI]). The 60 items forming the Spanish version of the NEO-FFI (Costa & McCrae, 1992) was administered to measure personality traits. This is a self-report measure of five personality dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness. Participants indicate their level of agreement with each item on a 5-point Likert-type scale (1 = *strongly disagree*, 5 = *strongly agree*). The internal consistency reliability coefficient, Cronbach's α, of the Spanish version of the NEO-FFI, adapted by Cordero, Pamos, and Seisdedos (2008), ranges between 0.82 for agreeableness and 0.90 for neuroticism, similar to the English version. Internal consistency coefficients, Cronbach's αs, obtained in the initial sample ($n = 339$) used in this study, were .86, .83, .76, .75 and .82 for Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness, respectively.

Evidence of construct validity obtained in the initial sample used in this study ($n = 339$) showed the adequacy of exploratory factor analysis (Kaiser-Meyer-Olkin [KMO] = .867; $\chi^2 = 1687.33$, $p <$ .000). The exploratory factor analysis (principal components with varimax rotation) evidenced a five-factor solution in which all 60 items loaded adequately (>.30) on their intended factor, as theoretically expected.

TMMS-24. The Spanish short version (24 items; Fernández-Berrocal, Extremera, & Ramos, 2004) of the TMMS-48 by Salovey, Mayer, Goldman, Turvey, and Palfai (1995) measures three factors: (a) attention to feelings, (b) clarity of feelings, defined as understanding one's feelings, and (c) mood repair, defined as attempts to maintain pleasant moods or repair unpleasant ones. Participants indicate their level of agreement with each statement on a 5-point Likert-type scale (1 = *strongly disagree*, 5 = *strongly agree*). The scale has acceptable psychometric characteristics. For example, Salovey et al. reported adequate internal consistency (attention, $\alpha = .86$; clarity, $\alpha = .87$; and repair, $\alpha = .82$), and good convergent and discriminant validity for the subscales. The Spanish short version (24 items) of the TMMS (Fernández-Berrocal et al., 2004) was administered to a sample of 292 Spanish undergraduates, aged between 18 and 57 years, and the data were subjected to a principal component factor analysis with varimax rotation. The analysis showed a three-factor solution with attention, clarity, and repair as dimensions, in agreement with the findings reported by Salovey et al.. The internal consistency of the subscales was high (attention, $\alpha = .90$; clarity, $\alpha = .90$; and repair, $\alpha = .86$). Test–retest reliability after 4 weeks ranged from .60 (attention) to .83 (repair). The internal consistency coefficients, Cronbach's α, obtained in the sample used in this study ($n = 339$**) were as follows: attention ($\alpha = .89$), clarity ($\alpha = .86$), and repair ($\alpha = .85$). The exploratory factor analysis (principal components with varimax rotation) carried out on the data obtained in the sample used in this study ($n = 339$***) showed a three-factor solution, corresponding to the dimensions of attention (19.48% explained variance), clarity (17.39%), and repair (16.55%). The rotated factor matrix was examined to interpret the loadings of each item on the factor on which it was hypothesized to load. The range of item loadings by factor were as follows: attention, .64 to .79; clarity, .60 to .78; and repair, .57 to .85. These results are in agreement with findings for the English version (Salovey et al., 1995), and findings for the Spanish version of the TMMS (Fernández-Berrocal et al., 2004).

Career Success Criteria. To assess extrinsic career success, we used the items corresponding to salary from a specific questionnaire based on the employment questionnaires developed as part of the CHEERS (Schomburg & Teichler, 2006) and REFLEX studies (Agencia Nacional de Evaluación de la Calidad y Acreditación, 2007), which collect detailed information on aspects such as the degree course studied, transition from education to employment, first job following graduation,

employment history, current post, and the competences considered essential for entry to the labor market. The questionnaire consisted of 43 questions organized into seven sections covering various aspects related to training received, transition to employment, competences, and satisfaction, among others. Salary level was measured as gross monthly income, divided into seven categories: (1) less than 600 Euros (US$787); (2) between 600 and 1,000 Euros (US$787 to 1,312); (3) between 1,000 and 1,200 Euros (US$1,312 to 1,575); (4) between 1,200 and 1,500 Euros (US$1,575 to 1,969 dollars); (5) between 1,500 and 1,800 Euros (US$1,969 to 2,362); (6) between 1,800 and 2,000 Euros (US$2,362 to 2,625 dollars) and (7) more than 2,000 Euros (US$2,625). Due to the sensitive nature of income data, we used income levels rather than real euro/dollar values for each participant. A similar scale was used by Judge, Higgins, Thoreson, and Barrick (1999).

The intrinsic criterion of success (career satisfaction) was obtained from the sum of responses to items 30, 37, and 39, which assessed the degree of satisfaction with their careers on a 5-point scale where 1 = *low* and 5 = *high*. Cronbach's α of internal consistency was .79.

Procedure

The participants were enrolled in a 3-year longitudinal study. In the first phase, conducted in the academic year 2008–2009 when students were enrolled in the final year of their degree course, the NEO-FFI questionnaire was administered together with the Test of factor *g* and the TMMS-24 scale, to an initial sample of 906 subjects. In the second phase, which took place in the academic year 2011–2012, the initial sample was reduced to 339 graduates, comprising subjects who had participated in the first phase of the study, could be contacted 3.5 years after graduation and who were willing to continue participating. These completed a questionnaire designed to collect information about the employment status of the graduates studied previously and their entry into the workforce. The questionnaire, which required no more than 30 min to fill in, was administered online to be completed within a maximum period of 3 months from receipt.

Results

The correlations between all measures, with means and *SD*s, are shown in Table 1. As can be seen in this table, IQ was significantly and negatively correlated with neuroticism (−.23) and positively with extraversion (.29), but not with either salary or career satisfaction. Only one of the personality factors, neuroticism, was associated, negatively, with one of the success criteria, salary (−.24). Regarding TEI, only TMMS repair was positively associated with both criteria, salary (.26) and career satisfaction (.21). Finally, correlations between TEI dimensions and personality traits were generally significant, with coefficients that ranged between −.47 and .42.

To examine the predictive and incremental validity of TEI dimensions over IQ and the Big Five personality traits for ''salary'' and ''occupational level,'' we carried out hierarchical regression analyses (Table 2). For each regression model, a career success criterion (salary or career satisfaction) was the dependent variable, with general intelligence, personality, and TEI dimensions as independent variables (Step 1 = IQ; Step 2 = personality; and Step 3 = TEI dimensions).[1]

As shown in Table 2, TEI added significant variance (9%) to the prediction of salary above and beyond transient IQ and the Big Five personality traits as predictors. In the final step, ''openness'' ($\beta = -.30$; $p = .00$), and TMMS repair ($\beta = .30$; $p = .02$) appeared as significant factors.

With respect to career satisfaction, the model was not significant, although in the case of salary, openness ($\beta = -.33$; $p = .00$) and TMMS repair appeared as significant factors in the last step ($\beta = .33$; $p = .02$).

Table 1. Correlation Matrix of all Measures and Descriptive Statistics.

	M	*SD*	1	2	3	4	5	6	7	8	9	10	
1. IQ	102.4	15.5	1										
2. Neuroticism	31.9	8.3	−.23*	1									
3. Extraversion	45.6	6.7	.29**	−31**	1								
4. Openness	43.22	7.0	−.01	−.05	.22*	1							
5. Agreeableness	41.45	6.9	−.08	−.18	.21*	.35**	1						
6. Conscientiousness	46.2	6.3	.01	−.26**	.23*	.23*	.30**	1					
7. TMMS attention	26.34	5.63	.09	.27**	.16	.20*	.13	.10	1				
8. TMMS clarity	26.47	5.74	.07	−.45**	.42**	.19	.21*	.35**	.26**	1			
9. TMMS repair	28.53	6.08	.14	−.47**	.33**	.38*	.21*	.33**	.14	.52**	1		
10. Salary	1372	536	.01	−.24*	.06	−.17	−.00	.12	.01	−.09	.26*	1	
11. Career satisfaction	9.49	2.6	.00	−.12	.11	−.15	.07	.14	−.04	.08	.21*	.57**	1

Note. TMMS = Trait Meta-Mood Scale.
*$p < .05$, **$p < .01$.

Table 2. Results of Hierarchical Multiple Regression Analyses of Initial Career Success.

	Salary		Career satisfaction	
	β	ΔR^2	β	ΔR^2
Step 1: Mental ability		.00 ($p = .89$)		.00 ($p = .93$)
IQ	.01		.01	
Step 2: Personality traits		.11 ($p = .06$)		.08 ($p = .17$)
IQ	−.05		−.03	
Neuroticism	−.23*		−.06	
Extraversion	.04		.11	
Openness	−.21*		−.24*	
Agreeableness	−.01		.08	
Conscientiousness	.11		.13	
Step 3: Trait emotional intelligence		.09* ($p = .03$)		.06 ($p = .11$)
IQ	−.02		−.03	
Neuroticism	.00		.07	
Extraversion	−.03		.11	
Openness	−.30**		−.33**	
Agreeableness	.01		.10	
Conscientiousness	.04		.11	
TMMS attention	−.12		−.06	
TMMS clarity	.18		−.09	
TMMS repair	.30*		.33**	
Total adjusted R^2		.20		.14

Note. TMMS = Trait Meta-Mood Scale; $N = 103$. Change in R^2 is based on adjusted R^2.
*$p < .05$, **$p < .01$.

Discussion

In the present study, an analysis was conducted of the effects of TEI on extrinsic and intrinsic indicators of professional success in the early career stage, after controlling for the effects of GMA and personality traits. The results show that the increase in explained variance provided by TEI dimensions (especially TMMS repair) was only significant for salary (9%) and was slightly above that obtained in other studies (Bastian et al., 2005; Law, Wong, & Song, 2004). In the case of career satisfaction, TEI dimensions did not contribute significantly, although this criterion was positively predicted by TMMS repair and negatively by Openness.

Thus, only the trait emotional dimension of TMMS repair contributed beyond GMA and personality traits to salary level in the early career stage, while this contribution was not significant for level of career satisfaction. Our results in the case of salary are consistent with those obtained in studies that support the incremental validity of TEI over cognitive abilities and personality traits, but in disagreement with others reporting unclear results (Rode et al., 2008).

Our findings reinforce the importance of the emotional regulation dimension of TMMS repair, represented by aspects such as "having a mostly optimistic outlook, trying to think about pleasant things, trying to think positively or trying to maintain a good mood," which was more closely related to salary than to career satisfaction, so that individuals who show a greater capacity to overcome negative events achieve higher levels of salary early in their career. The fact that this dimension of emotional regulation adds significant variance to the prediction of salary over and above the other factors reinforces the importance of this dimension in the prediction not only of this type of criteria but also of others such as entrepreneurial self-efficacy (Salvador, 2008), the quality of one's interpersonal relationships (Lopes, Salovey, & Strauss, 2002) and life satisfaction (Extremera & Fernández-Berrocal, 2005).

Meanwhile, the TEI dimension of TMMS clarity, described by indicators such as ''being clear about feelings, being able to define them, knowing how one feels or understanding one's emotions,'' did not seem to be associated with any of the criteria, in contrast to associations found for the other criteria (Extremera & Fernández-Berrocal, 2005; Salovey et al., 1995).

Therefore, these results partially confirm the first hypothesis (for salary rather than for career satisfaction) and also provide partial support for the second hypothesis, since TMMS clarity did not appear for any of the criteria.

As regards GMA, our results show that IQ does not predict either salary or career satisfaction in the early career stages, in contrast to results reported by other authors who have found positive relationships between general intelligence and career success (Dreher & Bretz, 1991; Judge, Higgins, Thoreson, & Barrick, 1999; O'Reilly & Chatman, 1994), but consistent with other studies that found no relationship between the constructs (Rode et al., 2008) or found that this relationship was moderate (Ng, Eby, Sorensen, & Feldman, 2005) or negative (Ganzach, 1998).

The negligible direct contribution of general intelligence as a predictor of the criteria may have been due to (a) the type of sample studied (graduates whom it would be reasonable to assume have a high IQ), (b) the interaction between IQ and EI, in such a way that the correlation between variables and criteria varied depending on the IQ level (Coté & Miners, 2006), (c) the distal nature of IQ compared to EI in determining success (Spurk & Abele, 2011), or (d) the type of criteria on which the prediction equations were based (job performance compared to extrinsic career success).

On the other hand, the absence of a correlation in this study between general intelligence and EI is consistent with the results obtained in other studies (Davies, Stankov, & Roberts, 1998; Derksen, Kramer, & Katzko, 2002; Fox & Spector, 2000) and supports the differential validity of EI.

The results also show the importance of the personality trait openness as a negative predictor of career success, consistent with some previous studies (Bozionelos, 2004; Gelissen & De Graaf, 2006; Seibert & Kraimer, 2001) but in disagreement with others, which found a weak to positive relationship with salary, promotion, or job performance (Furnham, Taylor, & Chamorro-Premuzic, 2008; Ng et al., 2005; Palifka, 2009; Van der Linden, Te Nijenhuis, & Bakker, 2010). It therefore appears that in the early stages of a career, diffuse or wide-ranging interests may have a negative effect on achieving a higher salary.

As regards the other personality traits, the only significant relationship identified in our study was for neuroticism, which was associated negatively with salary, consistent with other studies (Salgado, 1998). This might be explained by the barrier that could arise as a result of focusing too much on one's own emotions rather than on employment goals that lead to professional achievement. Thus, subjects who worry too much achieve lower levels of career satisfaction, which would clarify the positive significant correlation between TMMS attention and neuroticism. The fact that only this criterion, and not salary, was affected indicates that these criteria have differential characteristics that render it difficult to generalize the relationship between TEI and general criteria.

When evaluating results, it is important to consider the study's strengths and limitations. The main limitation of this study concerns sample size. The present study may have lacked sufficient power to corroborate the statistical significance of the relationships that have been found using larger samples.

Besides this, one of the study's strengths is that the present research was based on longitudinal data; thus, conclusions regarding possible causal relationships can be made. Its importance also resides in indicating for the first time the relationship between TEI and career success criteria in the early stage. We also believe that this study has made a 2-fold contribution. On one hand, the results recommend the use of EI trait measures as a predictor of professional success indicators, and one practical implication of the present study is that the results can be used in the screening and selection process, as well as for guidance and orientation. On the other hand, it serves as a basis for the development of training actions related to socioemotional competences and aimed at University students.

In considering the theoretical implications of our findings, these have important consequences as regards understanding the influence of individual differences on career success.

Recommendations for future studies include the use of emotion-related cognitive measures via performance-based tests. In addition, variables that may moderate the impact of IE, such as cognitive and personality variables, as well as external variables such as job characteristics, should also be considered. Furthermore, in order to more fully understand the complex issue of career success, the results obtained in samples of professionals in the early stages of their careers are compared with those obtained for samples of professionals with more experience.

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Note

1. As a reviewer of this study has indicated, it is possible that the occupational field may also influence salary; however, an analysis of differences in salary between different occupational fields showed that these differences were not statistically significant, $F(4, 103) = 2.23$; $p = .071$.

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General mental ability as moderator of personality traits as predictors of early career success

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ABSTRACT

In this paper, we examine the effects of general mental ability (GMA) and the personality traits defined in the big five model on extrinsic and intrinsic indicators of career success, in a sample of 130 graduates who were in the early stages of their careers. Results from hierarchical regression analyses indicated that GMA does not predict any of the success indicators. In contrast, the combination of GMA and three of the Big Five Personality traits, conscientiousness, neuroticism, and openness, is significantly associated with greater early career success and has incremental predictive validity.

1. Introduction

As research studies have shown, general mental ability (GMA) predicts job performance across occupations, contexts and careers (Bertua, Anderson, & Salgado, 2005; Dreher & Bretz, 1991; Judge, Cable, Boudreau, & Bretz, 1995; Kuncel, Hezlett, & Ones, 2004; Ng, Eby, Sorensen, & Feldman, 2005; Salgado et al., 2003; Schmidt & Hunter, 2004).

However, although some authors believe that GMA is the most useful employee attribute for predicting job performance, explaining up to half the variance in occupational level in complex and higher level jobs (Schmidt & Hunter, 2004), it is not advisable to use it as the sole predictor. There are other factors that provide incremental validity in predicting labour outcomes (Bobko, Roth, & Potosky, 1999), indicating the desirability of including these as predictors, in addition to general intelligence.

Of the alternative predictive factors studied, personality traits in particular have received considerable attention due to their proven importance in predicting effective performance in different occupations (Boudreau, Boswell, & Judge, 2001; Cherniss, 2001). Factors such as self-esteem, proactiveness, locus of control, self-efficacy, self-control, optimism, Machiavellianism, occupational status and occupational self-efficacy have been shown to have positive relationships with career success criteria (Abele & Spurk, 2009; Eby, Butts, & Lockwood, 2003; Ng et al., 2005).

From among the personality variables, those based on the Five Factor Model have attracted the most research attention in both traditional and meta-analytic studies in the United States and the European Community (Boudreau et al., 2001; Ng et al., 2005; Salgado, 1998). The association known as "the big-five salary link" indicates that employees with a certain personality trait profile work harder and earn a higher salary (Barrick & Mount, 1991; Dilchert & Ones, 2008; Gelissen & De Graaf, 2006; Hülsheger, Specht, & Spinath, 2006; Judge, Higgins, Thoreson, & Barrick, 1999; Ng et al., 2005; Nyhus & Pons, 2005; Seibert & Kraimer, 2001; Tett, Jackson, & Rothstein, 1991).

The main results of the meta-analysis conducted by Ng et al. (2005) on the predictors of objective and subjective career success show that these predictors can be classified into four broad categories: human capital, organisational sponsorship, sociodemographic status and stable individual differences. Objective and subjective career success criteria are positively related yet distinct; the predictors of objective career success, exemplified by variables such as salary, and of subjective career success, operationalised by

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variables such as career satisfaction, are slightly different, with stable dispositional traits being more strongly related to subjective career success than to objective career success. Lastly, more research is required to identify other moderators of certain relationships.

This study focused on the relationships between stable individual differences and objective and subjective indicators of career success, paying particular attention to the interaction between personality and GMA. This paper is intended to clarify the interrelationships and contributions of GMA and personality traits to early career success.

As regards the criteria used, career success was defined by two measures of success: extrinsic, based on objective indicators such as salary, and intrinsic, based on subjective indicators such as career satisfaction (Judge et al., 1995).

The first question that arises is twofold. On the one hand, we wanted to determine whether the predictive superiority of GMA over all other factors was maintained in the case of professionals at the start of their careers, and on the other hand we wished to ascertain whether the predictive power of GMA differed according to whether we used extrinsic or intrinsic success criteria.

As regards the first aspect, although it would be logical to assume that intelligence would be the most important factor at the start of a career, since this is when employees must learn procedures, the few studies which have been conducted (O'Reilly & Chatman, 1994; Rode, Arthaud-Day, Mooney, Near, & Baldwin, 2008) have found no direct relationship between abilities and career success in the early career stage.

As for the relationship between GMA and extrinsic success factors such as salary or career advancement, the associations with mental ability have ranged from slightly positive to moderate (Dreher & Bretz, 1991; Judge et al., 1999; Ng et al., 2005). Meanwhile, the correlations obtained between mental ability and intrinsic success criteria such as job satisfaction were negative or non significant (Ganzach, 1998; Rode et al., 2008).

In our study, we hypothesised that high levels of GMA would lead to greater career success, since it is in the early career stage when most information must be assimilated (see Rode et al., 2008) and intelligence is a critical variable in this learning process. Thus, in the first hypothesis we did not differentiate between the results on the basis of extrinsic or intrinsic success criteria.

Hypothesis 1. General mental ability is positively related to initial career success for extrinsic and intrinsic career success criteria.

A second issue is whether intelligence is more important than personality factors in career success, or whether personality has incremental validity over intelligence. Although it would appear that personality traits contribute significantly to earnings and status attainment (Gelissen & De Graaf, 2006), some authors believe that the incremental validity of personality is nevertheless limited (McHenry, Hough, Toquam, Hanson, & Ashworth, 1990; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011). However, other authors have found that, controlling for general mental ability, personality is related to career success (Judge et al., 1999). In our study, we hypothesised that personality would add significantly to the variance contributed by GMA.

Hypothesis 2. Personality traits have incremental validity over GMA in predicting initial career success.

Thirdly, we wished to determine the relationship between personality factors and success criteria in the early career stage, i.e., to identify the factors which best predicted both types of success criteria. To this end, we analysed the main results reported in the literature.

Most results indicate a positive relationship between conscientiousness, salary and job satisfaction (Barrick & Mount, 1991; Judge, Heller, & Mount, 2002; Judge & Kammeyer-Mueller, 2011; Judge et al., 1999; Sutin, Costa, Miech, & Eaton, 2009) whereas studies on neuroticism have found that this factor correlates negatively with both intrinsic and extrinsic success criteria (Boudreau et al., 2001; Gelissen & De Graaf, 2006; Judge & Kammeyer-Mueller, 2011; Judge et al., 1999; Judge et al., 2002; Ng et al., 2005; Nyhus & Pons, 2005; Rode et al., 2008; Salgado, 1998; Seibert & Kraimer, 2001; Smithikrai, 2007; Sutin et al., 2009). The negative relationship between career success and factors such as hostility, depression, social anxiety, impulsiveness and vulnerability, and the association between these and neuroticism, determined the direction of the hypothesis proposed in relation to this factor.

Meanwhile, positive relationships have been found between extraversion and success criteria as regards both salary (Gelissen & De Graaf, 2006; Judge & Kammeyer-Mueller, 2011; Judge et al., 1999; Rode et al., 2008; Seibert & Kraimer, 2001; Sutin et al., 2009) and satisfaction (Boudreau et al., 2001; Judge et al., 2002; Seibert & Kraimer, 2001).

Although agreeableness can be an advantage in positions requiring interaction with other people, most studies have found a negative relationship between this factor and career success measured as salary (Boudreau et al., 2001; Judge et al., 1999; Ng et al., 2005; Nyhus & Pons, 2005; Rode et al., 2008; Seibert & Kraimer, 2001). As regards satisfaction, a positive relationship has generally been obtained between this and agreeableness (Bozionelos, 2004; Judge et al., 2002), although negative relationships have also been found (Seibert & Kraimer, 2001). For occupational level, negative relationships (García-Izquierdo, García-Izquierdo, & Ramos-Villagrasa, 2007) and non significant relationships have been obtained (Gelissen & De Graaf, 2006) between both. For other criteria, such as job performance (Hurtz & Donovan, 2000; Sutin et al., 2009) or success in job seeking, the associations obtained have been positive (Boudreau et al., 2001). Nevertheless, in view of the results obtained in most studies, a negative relationship was predicted in the corresponding hypothesis.

Lastly, the results obtained in studies on openness have been inconsistent. There appears to be a positive relationship with career success (Ng et al., 2005; Tett et al., 1991; Van der Linden, Te Nijenhuis, & Bakker, 2010), although negative associations have also been found (Furnham, Taylor, & Chamorro-Premuzic, 2008). In contrast, the majority of studies have found a negative relationship between openness and salary (Bozionelos, 2004; Gelissen & De Graaf, 2006; Seibert & Kraimer, 2001) or no association at all (Barrick & Mount, 1991; Boudreau et al., 2001), compared to those which found positive relationships (Palifka, 2009). Results for job satisfaction have also been varied, ranging from studies which found no relationship (Judge et al., 2002) or a slightly positive

association (Boudreau et al., 2001), to those which have obtained positive relationships (Eby et al., 2003; Sutin et al., 2009). Based on the results obtained in the majority of previous studies, in this study we proposed a negative relationship between openness and success criteria, postulating that too much openness in the early career stage can contribute negatively to the achievement of greater career success.

Given the above, we proposed the following hypotheses:

Hypothesis 3. Conscientiousness is positively related to initial career success.

Hypothesis 4. Neuroticism is negatively related to initial career success.

Hypothesis 5. Extraversion is positively related to initial career success.

Hypothesis 6. Agreeableness is negatively related to initial career success.

Hypothesis 7. Openness is negatively related to initial career success.

The last, but main question we wished to analyse was whether the relationship between personality factors and career success was moderated by GMA, and in particular, whether it might vary depending on the levels of GMA. Although both sets of predictors show independent validity, it is possible that their predictive value may increase when they are considered together (Hollenbeck & Whitener, 1988), since some authors have suggested that given the low validity of personality tests, a combination of personality with other predictors, such as ability, may increase its validity (Hunter & Hunter, 1984).

We included these interactions on the basis of considerations such as those formulated in industrial and organisational psychology "expectance models", which conceptualise performance as the interaction between ability and effort (motivation) or stable personality traits such as conscientiousness. The decision to include these three factors alone rather than all of the personality traits was based on an analysis of the findings on their intervention as part of a larger motivational construct, and on the argument about their role in career success which suggests that the more stable and responsible an individual is, and the less open, the more able that person will be to generate higher motivational concentration, leading to greater achievement.

As in the study by Schmidt and Hunter (1998), we postulated that conscientiousness may come to be viewed as the most important motivational trait variable in the work domain. Interesting results have been obtained when conscientiousness is included together with the variables of ability; in their study of social status (income and professional status), Amelang and Steinmayr (2006) found that general intelligence and conscientiousness had approximately the same significant influence on the two performance criteria.

The rationale behind the inclusion of neuroticism is its repeated negative weight as an individual difference variable and its association with other variables such as anxiety, self-control, emotional stability and social skills, which are linked to the dimensions of emotional intelligence and in some cases have been found to interact with IQ when predicting job performance (Coté & Miners, 2006) or with GMA for salary (Ferris, Witt, & Hochwarter, 2001). Openness has been included among the possible mediating variables due to the inconsistent results obtained for this factor as a predictor, and the fact that it forms part of the general personality factor known as plasticity (Van der Linden et al., 2010).

Very little empirical research has been conducted on the interaction effects of cognitive and personality variables on career success in the early career stage, with inconclusive results. Some studies have found evidence of interaction (O'Reilly & Chatman, 1994) and others have not (Rode et al., 2008). In their study of a sample of recent MBA graduates, O'Reilly and Chatman (1994) found that neither GMA nor the motivational trait of conscientiousness alone was a good predictor of early management success. In contrast, their interaction was the strongest predictor of early career success for MBA graduates. Thus, the combination of high general cognitive ability and high motivation is significantly associated with greater early career success. On the other hand, in a sample of organisational behaviour students, Rode et al. (2008) did not find any evidence of interaction effects.

Given these inconsistencies, in our last three hypotheses we wished to test the interaction of conscientiousness, neuroticism, and openness with GMA as predictors of early career success, postulating that GMA would act as a moderator of these relationships. As indicated earlier, in this study we focused on the incremental validity of using personality in conjunction with ability.

Hypothesis 8. As an indicator of GMA, IQ moderates the relationships between conscientiousness and initial career success.

Hypothesis 9. IQ moderates the relationships between neuroticism and initial career success.

Hypothesis 10. IQ moderates the relationships between openness and initial career success.

2. Material and methods

2.1. Participants

The study was conducted on a sample of 130 university graduates who were in employment at the time of the study. Of these, 36% were men and 64% were women, with a mean age of 26.4 years (standard deviation 4.38). The sample consisted of graduates who

reported that they were working, in a survey conducted of 339 university graduates from the University of Alicante (Spain) three years after completion of their studies. These 339 students had participated three years earlier in a study that assessed their personal and socio-emotional competences, having been selected through a stratified random sampling system proportional to the number of students enrolled in each of the fields of science and technology (25.7%), social sciences (18.9%), education (24.5%), bio-health (15.9%) and humanities (6.5%).

2.2. Measures

2.2.1. Test of "g", Scale 3, by R.B. Cattell and A.K.S. Cattell (adapted to Spanish by Técnicos Especialistas Asociados, 1994)

To measure general mental ability, we used the test of "g", Scale 3 by R.B. Cattell and A.K.S. Cattell (adapted to Spanish by Técnicos Especialistas Asociados, 1994). This collectively applied scale consists of four subtests: series, classification, matrices and conditions, which require cognitive operations such as identification, perceived similarities, seriation, classification, matrices and comparisons, enabling us to obtain the IQ of the sample. The "g" factor loadings are high, around .90.

2.2.2. Big Five Inventory (NEO-FFI, Costa & McCrae, 1992)

This is a self-report measure of five personality dimensions: Extraversion, Agreeableness, Consciousness, Neuroticism and Openness. The short version consists of 60 elements. Participants indicate their level of agreement with each item on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The reliability of the Spanish version ranges between .82 for agreeableness and .90 for neuroticism, similar to the English version.

2.2.3. Career success criteria

To assess extrinsic career success, we used the items corresponding to salary from a specific questionnaire based on the employment questionnaires developed as part of the CHEERS (Schomburg & Teichler, 2006), and REFLEX studies (Agencia Nacional de Evaluación de la Calidad y Acreditación, ANECA, 2007), which collect detailed information on aspects such as the degree course studied, transition from education to employment, first job following graduation, employment history, current post and the competences considered essential for entry to the labour market. The questionnaire consisted of 43 questions organised into seven sections covering various aspects related to training received, transition to employment, competences and satisfaction, among others. Salary level was measured as gross monthly income, divided into seven categories: less than 600 Euros (1), between 600 and 1000 Euros (2), between 1000 and 1200 Euros (3), between 1200 and 1500 Euros (4), between 1500 and 1800 Euros (5), between 1800 and 2000 Euros (6) and more than 2000 Euros (7).

The intrinsic criterion of success (career satisfaction) was obtained from the sum of responses to items 30, 37 and 39, which assessed the degree of satisfaction with their careers on a 5-point scale where 1 = low and 5 = high. Cronbach's alpha of internal consistency was .79.

2.3. Procedure

The participants were enrolled in a three year longitudinal study. In the first phase, conducted in the academic year 2008–2009 when students were enrolled in the final year of their degree course, the NEO-FFI questionnaire was administered together with the Test of factor g to an initial sample of 906 subjects. In the second phase, which took place in the academic year 2011–2012, the initial sample was reduced to 339 graduates, comprising those who had participated in the first phase of the study and continued to participate after graduation by completing a questionnaire designed to collect information about the employment status of the graduates studied previously and their entry into the workforce. The questionnaire, which required no more than 30 min to fill in, was administered online to be completed within a maximum period of three months from receipt.

2.4. Design and data analysis

A predictive correlational design was used, and data were analysed using hierarchical multiple regression. The calculations were performed using SPSS version 19, licenced to the University of Alicante. The MODPROBE tool (Hayes & Matthes, 2009) was used to probe the interactions.

3. Results

Correlations between all measures, mean and standard deviations are shown in Table 1. As can be seen from this table, IQ was significantly and negatively correlated with neuroticism (−.23) and positively with extraversion (.29), but not with either salary or career satisfaction. Only one of the personality factors, neuroticism, was associated, negatively, with salary (−.24).

To examine the predictive and incremental validity of the Big Five personality trait dimension and the interactions proposed above, the effect of IQ on "Salary" and "Career satisfaction", we performed hierarchical regression analyses (Table 2). For each regression model, a career success criterion (salary or career satisfaction) was the dependent variable, and IQ, personality traits, and interactions were considered as independent variables (step 1 = IQ; step 2 = personality traits; step 3 = Conscientiousness × IQ; Neuroticism × IQ, and Openness × IQ). Following the guidelines described by Aiken and West (1991) and Friedrich (1982) to

Table 1
Correlation matrix of all measures and descriptive statistics.

	M	*SD*	1	2	3	4	5	6	7	8
1. IQ	102.4	15.5	1							
2. Neuroticism	31.9	8.3	−.23*	1						
3. Extraversion	45.6	6.7	.29**	−31**	1					
4. Openness	43.22	7.0	−.01	−.05	.22*	1				
5. Agreeableness	41.45	6.9	−.08	−.18	.21*	.35**	1			
6. Conscientiousness	46.2	6.3	.01	−.26**	.23*	.23*	.30**	1		
7. Salary	1372	536	.01	−.24*	.06	−.17	−.00	.12	1	
8. Career satisfaction	9.49	2.6	.00	−.12	.11	−.15	.07	.14	.57**	1

* $p < .05$.
** $p < .01$.

estimate interaction effects using multiple regression, all variables were transformed into z standardised scores, and significance was assessed using unstandardised coefficients.

As can be seen in Table 2, in step 2, significant effects were only found for neuroticism on salary (B = −.23, $p < .05$) and openness on salary (B = −.21, $p < .05$) and satisfaction (B = −.24, $p < .05$), but the change in F did not achieve statistical significance ($p = .06$). In contrast, the introduction of interactions in step 3 produced an increase in explained variances of 11% for salary and 9% for career satisfaction.

Conscientiousness, extraversion, and agreeableness were not significantly related to any of the criteria; neuroticism was significantly and negatively related to salary (B = −.29, $p < .01$) but not to career satisfaction, and openness was significantly and negatively related to salary (B = −.25, $p < .05$) and career satisfaction (B = −.27, $p < .05$).

All interactions were negative. The significant negative coefficients associated with the interaction terms indicate that the relationships between predictive personality variables and career success tended to be more negative for individuals with higher IQ. Interactions between Conscientiousness × IQ were negatively related to salary (B = −.29, $p < .05$) and career satisfaction (B = −.30, $p < .05$).

Interactions between Neuroticism × IQ, and Openness × IQ were only related to salary (B = −.23 $p < .05$ and B = −.22, $p < .05$, respectively).

Probing the interactions using the MODPROBE tool (Hayes & Matthes, 2009) provided additional information for the interpretation of these conditional effects. To assess the effect of predictor variables on salary and career satisfaction at specific conditional values of the moderator, we computed simple slopes at the mean and at 1*SD* above and 1*SD* below the mean. In addition, the *regions of significance* were established using the Johnson–Neyman technique (Johnson & Neyman, 1936).

Taking salary as the criterion, the simple slope of salary regressed on conscientiousness was positive and significant only at low IQ (B = .36, $p = .03$), specifically at IQ = 94, whilst at high IQ the slope was negative (B = −.14, $p = .38$) and not

Table 2
Results of hierarchical multiple regression analyses of initial career success.

	Salary		Career satisfaction	
	B	ΔR^2	B	ΔR^2
Step 1: mental ability		.00 ($p = .89$)		.00 ($p = .93$)
IQ	.01		.01	
Step 2: personality traits		.11 ($p = .06$)		.08 ($p = .17$)
IQ	−.05		−03	
Neuroticism	−.23*		−.06	
Extraversion	.04		.11	
Openness	−.21*		−.24*	
Agreeableness	−.01		.08	
Conscientiousness	.11		.13	
Step 3: interactions		.11** ($p = .00$)		.09* ($p = .03$)
IQ	.03		.04	
Neuroticism	−.29**		−.11	
Extraversion	.03		.11	
Openness	−.25*		−.27*	
Agreeableness	−.00		.08	
Conscientiousness	.09		.12	
Conscientiousness × IQ	−.29*		−.30*	
Neuroticism × IQ	−.23*		−.20	
Openness × IQ	−.22*		−.15	
Total adjusted R^2		.22		.17

Note: N = 103. Change in R^2 is based on adjusted R^2.
* $p < .05$.
** $p < .01$.

significant. The simple slope on neuroticism was negative and significant at average (B = −.25, p = .02) and high IQ (B = −.38, p = .01), specifically from IQ = 98, and the simple slope of salary regressed on openness was negative and significant at average (B = −.22, p = .04) and high IQ (B = −.45, p = .00), specifically from IQ = 102. Taking career satisfaction as the criterion, the simple slope on career satisfaction regressed on conscientiousness was positive and significant only at low IQ (B = .39, p = .02), specifically at IQ = 97.

By way of example, Figs. 1 and 2 show the interaction Conscientiousness × IQ for each criterion, salary and career satisfaction, with raw scores for the measured variables.

4. Discussion

The overall results of this study show that in the early career stage, career success, measured as salary and career satisfaction, was predicted by interactions between personality variables and general mental ability (GMA). Neither GMA nor personality traits alone predicted early career success as well as interactions did. Specifically, salary was predicted negatively by neuroticism and openness, and by interactions between Conscientiousness × IQ, Neuroticism × IQ, and Openness × IQ, whereas career satisfaction was predicted negatively by Openness and by the interaction between Conscientiousness × IQ. These interactions explained 11% of the variance over GMA and personality traits for salary and 9% for career satisfaction.

Slightly different results were observed for each of the criteria considered, where the weight of the variables studied was greater for salary than for career satisfaction, indicating that although they shared similarities and served as indicators of career success, they reflected different components of success, as reported by Ng et al. (2005).

In addition to this general finding, a more detailed review and analysis of the results of this study indicate the following.

First, mental ability did not predict either salary or career satisfaction in the early career stage. On the basis of these results, which differ from those found by Judge et al. (1999) and Ng et al. (2005) but are consistent with those reported by Rode et al. (2008), Hypothesis 1 can be rejected. Contrary to what might be expected, greater mental ability is not required for learning processes and procedures specific to a given position in the early career stage. This would seem to imply that at this stage of a career, there are other factors which are more influential than intellectual ability. However, the importance of mental ability cannot be discounted since its impact may increase over the years, as indicated by McDaniel, Schmidt, and Hunter (1988). Another possible explanation for the results is that mental ability does not exert a direct effect but rather, it mediates personality traits. As will be discussed below, this second view seems to be supported by the data obtained in our study.

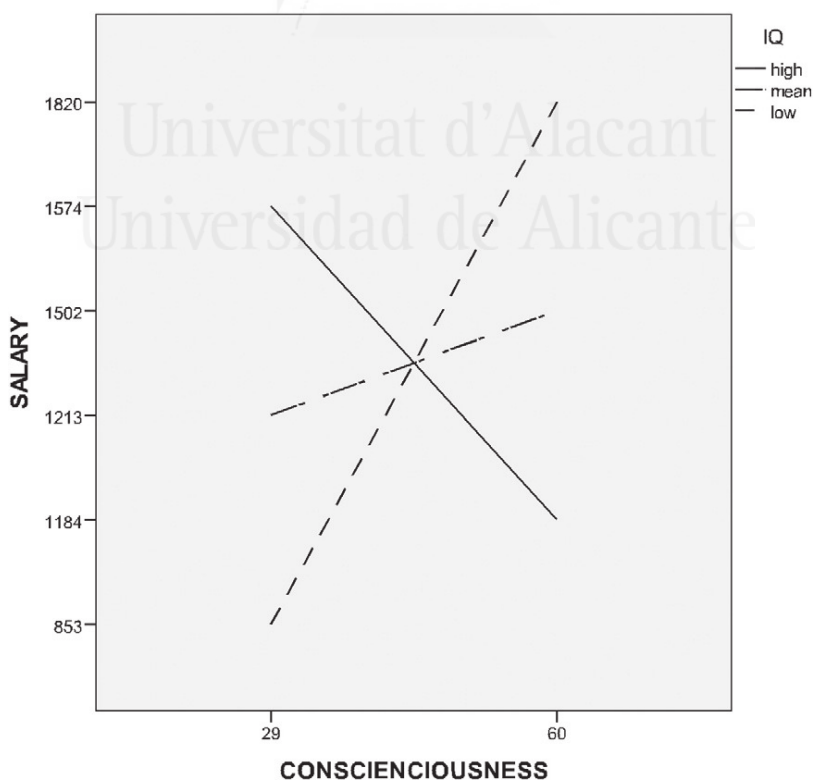

Fig. 1. Interaction between Conscientiousness and IQ in predicting salary.

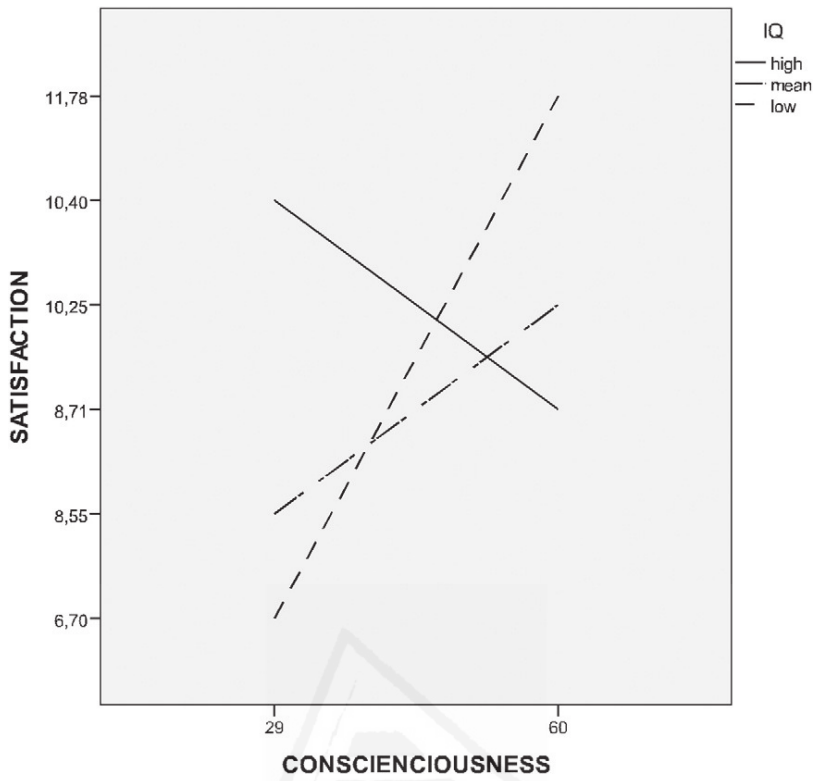

Fig. 2. Interaction between Conscientiousness and IQ in predicting career satisfaction.

As regards the negative association found between IQ and neuroticism, this could be explained by the mediating effect of anxiety, as has been suggested by Moutafi, Furnham, and Tsaousis (2006). The significant positive relationship found between IQ and extraversion is consistent with most of the results obtained in other studies, as indicated for example in the meta-analysis conducted by Wolf and Ackerman (2005).

Second, the effects of personality traits on career success after controlling for the effects of GMA were not significant, contrary to the findings reported in studies such as those by Judge et al. (1999) and Gelissen and De Graaf (2006). Thus, Hypothesis 2 is not supported, leaving the door open to other variables, such as emotional intelligence, which may add significant variance over GMA (O'Boyle et al., 2011).

Third, the only personality factors associated with career success in the early career stage were neuroticism (salary) and openness (salary and career satisfaction), both of which presented negative relationships with these criteria, thus confirming Hypothesis 7 and partially confirming Hypothesis 4.

In the case of neuroticism, these findings are consistent with most of the studies mentioned in the introduction and confirm the potentially negative effect of interference from concerns about achieving the occupational goals that lead to career success (salary). This relationship did not occur in the case of career satisfaction, which suggests that greater stability is not necessarily associated with greater career satisfaction, perhaps because subjects were still at the start of their career. Different results might be obtained after a longer period of time.

The results obtained in the present study for openness support studies that report a negative relationship between this factor and career success (Bozionelos, 2004; Gelissen & De Graaf, 2006; Seibert & Kraimer, 2001). Greater concentration in the early career stage seems crucial for success. Lack of focus or excessive attention to different interests would be counterproductive, except in the case of artistic or creative positions.

In contrast to the studies cited in the Introduction, we found no evidence of a relationship between the other personality traits and medium or long-term career success criteria. In our study, conscientiousness, extraversion and agreeableness showed no relationship with success in the early career stage, and thus Hypotheses 3, 5 and 6 are not supported. Of these, the most unexpected result, given the evidence reported to date, was the non-intervention of conscientiousness as a predictor for any of the criteria. However, it should be borne in mind that these employees had not been working for very long, and for tenacity to influence outcomes it is possibly necessary to have accumulated more experience. As regards the lack of a relationship between the other two factors, extraversion and agreeableness, one possible explanation could be that social or interpersonal aspects are less important in the early career stage, since employees are not usually in charge of others at this stage in their career, and perform many tasks individually. Another explanation for these results may be that these factors exert their influence indirectly rather than directly, as indicated in the research by Spurk and Abele (2011).

Lastly, the interactions between the personality traits considered in the study (conscientiousness, neuroticism and openness) and intelligence showed the strongest effect on career success; consequently, the effects of these personality variables on salary and career satisfaction are moderated by the level of intelligence. These results are consistent with those reported by O'Reilly and Chatman (1994) for a similar sample, and indicate the strength of the interactions, although in our case the associations between the interactions and the criteria were negative. In other words, the relationship between personality traits and professional success, salary and/or job satisfaction, was not the same for all levels of intelligence, but rather, was positive for employees with low intelligence and negative for employees with a higher level of intelligence. In addition, the effects on career satisfaction of Neuroticism × IQ and Openness × IQ were not significant, and thus Hypotheses 8, 9 and 10 are only partially supported.

The form and significance of interactions show that in the case of Conscientiousness × IQ, conscientiousness becomes a stronger predictor of career success as IQ decreases. Conscientiousness was positively related to salary and career satisfaction among those with low general mental ability. In other words, employees with low levels of cognitive intelligence obtained a better salary and were more satisfied with their careers when they were more tenacious, self-disciplined, organised and methodical. In contrast, for subjects with a medium or high intelligence, greater or lesser conscientiousness did not lead to greater success.

The relationship was slightly positive in individuals with average intelligence; as conscientiousness increased, salary improved. However, the relationship became negative, although not significantly so, in employees with high intelligence. On average, individuals with low levels of intelligence and a high level of conscientiousness may even obtain higher salaries (around about 1800 Euros) than individuals with a high level of intelligence, who obtained a salary of around 1600 Euros. Interestingly, as the level of conscientiousness increased in individuals with higher intelligence, salary levels declined to about 1200 Euros, although this relationship did not reach statistical significance.

Similar relationships were observed when career satisfaction was used as the criterion. The most satisfied individuals were those with the highest levels of conscientiousness in the group with low levels of intelligence, whereas those in the group with high levels of intelligence reported a similar level of satisfaction to those with low intelligence, whilst presenting lower levels of conscientiousness. One possible explanation could be that the most satisfied individuals obtained their satisfaction from having attained a higher salary through their own efforts, an interpretation which would be supported by the high correlation between salary and satisfaction.

These results are similar to those found by Coté and Miners (2006) for the effect of emotional intelligence on job performance, who reported that as cognitive ability declined, the relationship between emotional intelligence and job performance became positive, implying that effort may compensate for low levels of mental ability. However, they are inconsistent with the results obtained by Rode et al. (2008) and by Chamorro-Premuzic and Arteche (2008), who stated that the effects of conscientiousness on employment outcomes are largely independent of intellectual ability.

In the case of neuroticism, the interaction indicated a negative relationship between neuroticism and salary for those with high and average intelligence, which suggests that employees with average to high cognitive intelligence will obtain a higher salary if they are less neurotic; in other words, if they are more emotionally stable and less anxious, impatient and careless. In individuals with lower levels of intelligence, neuroticism was not associated with salary. The similarity between the simple slopes for neuroticism and openness is striking.

Lastly, and with respect to openness, the results indicate a negative relationship between openness and salary for those with high and average IQ, which suggests that employees with average to high cognitive intelligence will obtain a higher salary if they are less dreamy, idealistic and imaginative, and when their range of interests is more limited. As with neuroticism, a high score for this factor would only produce a negative effect from a certain level of intelligence onwards, but would not produce an effect below that level. For this variable, having a low cognitive intelligence did not affect any of the criteria.

The results that show significant moderating effects in middle/high IQ in relationship between neuroticism and openness over salary, could be explained by the major use that high IQ subjects make of working memory (Kahneman, 2011). This increased use of cognitive resources, could consume much of the limited resources of attention, which would make them more sensitive to the negative influence — both of the tension produced by anxiety associated with neuroticism and of the negative influence of attentional dispersion associated with openness. Findings of Austin, Deary, and Gibson (1997), that found evidence for increased differentiation of neuroticism and openness at higher levels of ability and Razoumnikova (2003), that suggest that EEG spectral parameters might reflect the relationships between neuronal integration and personality/intelligence factors, could contribute to a sufficient basis for future verification research in this area.

4.1. Limitations

When evaluating results, it is important to consider the study's strengths and limitations.

One limitation of this study was model specification. Although it was not the goal of this study to test a comprehensive model of career success predictors, but rather to test a model which analysed the interaction between stable individual differences in the prediction of professional success when relevant variables are omitted, the model may present a specification error.

A second study limitation concerns sample size. The present study may have lacked sufficient power to corroborate the statistical significance of the relationships that have been found using larger samples, especially with moderated multiple regression (Aguinis, 1995).

A third limitation was that this study did not examine the effects of mediation, although the variables studied could play a mediating role, as has been found in other studies. Nonetheless, the lack of a relationship between the modulating variable of IQ and the dependent variables of salary and career satisfaction, together with the lack of a relationship between the predictor variables and the moderating variables (with the exception of neuroticism) may exclude a mediating effect of the cognitive intelligence variable,

according to the criteria of Baron and Kenny (1986). However, its mediating effect in the case of neuroticism and extraversion may also merit research.

On the other hand, one of the study's strengths is that the present research was based on longitudinal data; thus conclusions regarding possible causal relationships can be made.

4.2. Implications

In considering the theoretical implications of our findings, some things become apparent. First, these results can be used to argue that future research on the relationships between individual differences and career success should not only examine the direct or main effect of such differences but should also focus on interaction or moderation. This would have important consequences as regards understanding the influence of individual differences on career success.

Our results suggest the need to include interactions between ability and personality variables as predictors of selection and promotion processes in the early career stage, since if only abilities or aspects of personality are considered, the capacity to identify candidates who may achieve career success in the middle to long term could be severely hampered, leading to false negative results. As indicated, these interactions may form part of a motivational construct which in this case would act as a proximal rather than distal variable in determining career success (Spurk & Abele, 2011). Therefore, rather than asking whether GMA exerts more influence than personality, it would be more appropriate to explore whether it does so directly or indirectly, for example through personality traits.

The present study also offers practical implications; the results can be used in the screening and selection process, as well as for guidance and orientation. For example, if employees can compensate for low levels of intelligence with a high level of conscientiousness, programmes could be implemented with such employees to improve their career success and their level of satisfaction with their careers.

Knowledge of the confidence bands and the exact scores after which the modulating effects occur in the case of one or another variable (Frass & Newman, 1997) could help improve knowledge of individuals and lead to more accurate decisions about who should participate, for example, in personal development programmes.

Implications and recommendations for future research include incorporating ability × stable dispositional trait models among predictors, as well as other personal and emotional intelligence variables and situational factors such as occupational characteristics. Furthermore, a comparison should be conducted of the results obtained in samples of professionals in the early stages of their careers with those obtained for samples of professionals with more experience, to more fully understand the complex issue of career success.

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4.2. Resultados globales y discusión

4.2. Resultados globales y discusión.

En *primer lugar*, los resultados muestran la no existencia de relaciones significativas de la inteligencia general (IG) con los criterios salario y nivel del puesto (tabla 1.), ni con la satisfacción con la carrera (tabla 3.), lo que hace que la Hipótesis 1: *La inteligencia general, contribuye significativamente a la predicción del éxito profesional extrínseco* (salario y nivel del puesto), e intrínseco (satisfacción con la carrera), no se confirme.

Tabla 1. *Resultados de análisis de regresión jerárquica (artículo 1).*

	Salario		Nivel del puesto	
	β	ΔR^2	β	ΔR^2
Paso 1: Covariables		.02		.05
Sexo	-.13		-.23*	
Edad	-.05		-.03	
Paso 2: Inteligencia general		.00		.00
Sexo	-.13		-.23*	
Edad	-.05		-.25	
Inteligencia general	.01		.02	
Paso 3: Inteligencia emocional percibida		.12 **		.06
Sexo	-.15		-.24*	
Edad	-.06		-.05	
Inteligencia general	-.01		.02	
TMMS atención	-.18		-.21*	
TMMS claridad	.19		.07	
TMMS control	.20*		.14	
R^2 total		.14		.11

N =103. Cambio en R^2 está basado en R^2 ajustado. *p<.05 **p<.01

Aunque en algunos estudios, se ha evidenciado una relación positiva entre inteligencia general y éxito profesional (Dreher y Bretz, 1991; Judge y cols., 1999; O´Reilly y Chatman, 1994), los resultados de este trabajo, se acercan más a los encontrados en otros estudios en los que no se muestra relación entre ambos constructos (Rode y cols., 2008) o ésta es solo moderada (Ng y cols., 2005) o negativa (Ganzach, 1998).

Una posible *explicación* de estos resultados, es que los conocimientos necesarios para la correcta ejecución de las tareas, que median la relación entre IG y el desempeño laboral como pusieron de manifiesto Hunter y Hunter, (1984), no sean tan relevantes en esta fase de la carrera. En las fases iniciales, es importante aprender pero no tanto mostrar, evidenciar o aplicar lo que se ha

aprendido. De hecho, la correlación entre inteligencia y rendimiento aumenta con los años (McDaniel, Schmidt y Hunter, 1988). Por otro lado, la adquisición de conocimientos no depende sólo de la inteligencia, otros factores pueden intervenir en esta etapa de la carrera (Ackerman, 1987; Kanfer y Ackerman, 1989).

El tipo de *muestra utilizada en el estudio* (titulados a los que se supone con un alto nivel de IG), la posible *interacción entre IG e inteligencia emocional* (O´Reilly y Chatman, 1994), de manera que la correlación entre las variables y los criterios varíe en función del nivel de inteligencia (Coté y Miners, 2006), e*l carácter distal de la IG frente a la inteligencia emocional en la determinación del éxito* (Spurk y Abele, 2011), o el tipo de *criterio sobre el que se proyectan las ecuaciones de predicción* (éxito profesional extrínseco frente al desempeño en el puesto), pueden también explicar estos resultados no esperados.

Merece la pena destacar en este primer bloque de resultados, la importancia del *sexo*, que mostró relaciones negativas y significativas con el criterio nivel del puesto, aunque no con salario, cuando se introdujo como covariable (tabla 2.), indicando que los varones alcanzan puestos de mayor nivel que las mujeres al inicio de su carrera.

Tabla 2. *Resultados de análisis de regresión jerárquica (artículo 1).*

	Salario		Nivel del puesto	
	β	ΔR^2	β	ΔR^2
Paso 1: Covariables		.02		.05
Sexo	-.13		-.23*	
Edad	-.05		-.03	
Paso 2: Inteligencia general		.00		.00
Sexo	-.13		-.23*	
Edad	-.05		-.25	
Inteligencia general	.01		.02	
Paso 3: Inteligencia emocional percibida		.12 **		.06
Sexo	-.15		-.24*	
Edad	-.06		-.05	
Inteligencia general	-.01		.02	
TMMS atención	-.18		-.21*	
TMMS claridad	.19		.07	
TMMS control	.20*		.14	
R^2 total		.14		.11

N =103. Cambio en R^2 está basado en R^2 ajustado. *p<.05 **p<.01

Resultados similares fueron encontrados por Rode y cols., (2008), para el salario. La replicación de estos resultados en otros estudios podría poner de manifiesto, entre otros aspectos, una cierta preferencia por los varones a la hora de ocupar posiciones de mayor nivel, lo que podría tener implicaciones relevantes en las regulaciones sobre igualdad de género.

En *segundo lugar*, los resultados indican que de los cinco factores de personalidad, los únicos asociados con el éxito profesional al inicio de la carrera fueron Neuroticismo (negativamente con salario), y Apertura (negativamente con salario y satisfacción con la carrera), ver tabla 3., lo que hace que la Hipótesis 2: *Las dimensiones de personalidad responsabilidad y extraversión están relacionadas positiva y significativamente con el éxito profesional al inicio de la carrera (salario y satisfacción con la carrera); las dimensiones de neuroticismo, amabilidad y apertura, lo están negativamente*), se confirme sólo de manera parcial.

Tabla 3. *Resultados de análisis de regresion jerárquica (artículo 3).*

	Salario		Satisfacción con la carrera	
	β	ΔR^2	β	ΔR^2
Paso 1: Inteligencia general		.00 (p = .89)		.00 (p = .93)
Inteligencia general	.01		.01	
Paso 2: Factores de personalidad		.11 (p = .06)		.08 (p =.17)
Inteligencia general	-.05		-03	
Neuroticismo	-.23*		-.06	
Extraversion	.04		.11	
Apertura	-.21*		-.24*	
Amabilidad	-.01		.08	
Responsabilidad	.11		.13	
Paso 3: Interacciones		.11** (p = .00)		.09* (p = .03)
Inteligencia general	.03		.04	
Neuroticismo	-.29**		-.11	
Extraversion	.03		.11	
Apertura	-.25*		-.27*	
Amabilidad	-.00		.08	
Responsabilidad	.09		.12	
Responsabilidad x Inteligencia general	-.29*		-.30*	
Neuroticismo x Inteligencia general	-.23*		-.20	
Apertura x Inteligencia general	-.22*		-.15	
Total R^2		.22		.17

N =103. Cambio en R^2 está basado en R^2 ajustado. *p<.05 **p<.01

Con respecto al primero de ellos, *Neuroticismo*, su asociación negativa con el criterio, congruente con otros estudios (Salgado, 1998), puede ser explicada por las consecuencias negativas que podría tener centrarse demasiado en las emociones propias para la consecución de las metas profesionales, debido al efecto mediador de la ansiedad, como ha sido sugerido por Moutafi, Furnham y Tsaousis (2006). El hecho de que esta relación negativa no se produzca en el caso de la satisfacción con la carrera, sugiere que una mayor estabilidad emocional no se asocia necesariamente a una mayor satisfacción, quizá porque los sujetos están aún al inicio de su carrera. Para empleados con una mayor experiencia, es posible que una menor ansiedad sí que esté relacionada con una mayor satisfacción con la carrera.

Los resultados muestran también la importancia del factor de personalidad *Apertura* como un predictor negativo del éxito en la carrera o en la formación, de manera congruente con estudios previos (Barrick y Monunt, 1991; Bozionelos, 2004; Gelissen y De Graaf, 2006; Seibert y Kraimer, 2001), pero en desacuerdo con otros, que encontraron una ligera relación positiva con el salario, la promoción o el rendimiento en el trabajo (Furnham y cols., 2008; Ng y cols., 2005; Palifka, 2009; Van der Linden y cols., 2010). Una explicación de los efectos negativos de la Apertura en el éxito en la carrera podría ser, la mayor necesidad de concentración y focalización en esta etapa profesional, que podría verse interferida por una dispersion o amplitud en los intereses profesionales, lo que sería contraproducente en la mayoría de profesiones, excepto en el caso de posiciones artísticas o creativas.

Para el resto de factores de personalidad y en contraste con los estudios citados en la introducción, no se encontró evidencia de relación significativa entre estos factores (*Responsabilidad, Extraversión y Amabilidad*) y los criterios de éxito. De estos resultados, el más sorprendente es la no intervención de la dimension de *Responsabilidad* como predictor, en contra de lo evidenciado por la mayoría de los estudios, lo que podría explicarse por la necesidad de dejar pasar más tiempo y experiencia para que los efectos de la dedicación, el esfuerzo y la tenacidad se puedan manifestar en los resultados. Con respecto a la no relación de los otros dos factores con los criterios, una posible explicación

podría ser que los aspectos sociales e interpersonales que contienen estos rasgos, sean menos importantes al inicio de la carrera, dado que lo normal en estas etapas es no tener aún personas a su cargo y realizar por tanto la mayor parte de las areas de manera individual. Otra explicación posible, podría ser que estos factores actuen de manera indirecta más que directa sobre los criterios, como se indicó en la investigacion de Spurk y Abele (2011) y que probamos en la hipótesis 8.

En *tercer lugar*, los resultados indican que la contribución de la personalidad al éxito en la carrera despues de controlar los efectos de la inteligencia general no es significativa, lo que hace que la Hipótesis 3: *La personalidad, hace una contribución significativa a la predicción del éxito profesional al inicio de la carrera (salario y satisfacción con la carrera), más allá de lo que lo hace la inteligencia general,* no se confirme (tabla 4. y 7.)

Tabla 4. *Resultados de análisis de regresion jerárquica (artículo 3).*

	Salario		Satisfacción con la carrera	
	β	ΔR^2	β	ΔR^2
Paso 1: Inteligencia general		.00 (p = .89)		.00 (p = .93)
Inteligencia general	.01		.01	
Paso 2: Factores de personalidad		.11 (p = .06)		.08 (p =.17)
Inteligencia general	-.05		-03	
Neuroticismo	-.23*		-.06	
Extraversion	.04		.11	
Apertura	-.21*		-.24*	
Amabilidad	-.01		.08	
Responsabilidad	.11		.13	
Paso 3: Interacciones		.11** (p = .00)		.09* (p = .03)
Inteligencia general	.03		.04	
Neuroticismo	-.29**		-.11	
Extraversion	.03		.11	
Apertura	-.25*		-.27*	
Amabilidad	-.00		.08	
Responsabilidad	.09		.12	
Responsabilidad x Inteligencia general	-.29*		-.30*	
Neuroticismo x Inteligencia general	-.23*		-.20	
Apertura x Inteligencia general	-.22*		-.15	
Total R^2		.22		.17

N =103. Cambio en R^2 está basado en R^2 ajustado. *p<.05 **p<.01

En contraposición a los resultados reportados por Judge y cols., (1999) y Gelissen y De Graaf (2006), la validez incremental de la personalidad sobre la inteligencia general no se puede apoyar por los resultados, lo que deja la puerta abierta a otras variables como la inteligencia emocional, que podrían añadir varianza significativa a la inteligencia general (O'Boyle y cols., 2011).

Merece la pena dejar constancia, de que esta tercera hipótesis no se confirma por poco, (ΔR^2 es de .11 (p = .06) para el salario), aunque para la satiasfacción con la carrera no deja lugar a dudas (ΔR^2 de .08 con (p =.17)), lo que hace que al menos para el salario, no se descarte como objeto de revisión en estudios futuros.

En *cuarto lugar*, los resultados muestran que el éxito en la carrera, medido por el salario y la satisfacción con la carrera, fue predicho por las interacciones entre factores de personalidad y la inteligencia general. Ni la inteligencia general ni la personalidad, de manera aislada pudieron predecir el exito tan bien como lo hicieron las interaciones, lo que hace que la Hipótesis 4: *las relaciones entre los factores de personalidad (Responsabilidad, Neuroticismo y Apertura) y el éxito profesional al inicio de la carrera (salario y satisfacción con la carrera), están moderadas por el nivel de inteligencia general, de forma que existe un efecto de interacción entre ambos predictores),* se confirme (tabla 5.)

Específicamente el salario fue predicho negativamente por Neuroticismo y Apertura y por las interacciones: Responsabilidad x Inteligencia general, Neuroticismo x Inteligencia general y Apertura x Inteligencia general. La satisfacción con la carrera fue predicha negativamente por Apertura y por la interacción Responsabilidad x Inteligencia general. Estas interacciones explicaron el 11% de la varianza en el salario y el 9% en la satisfacción con la carrera.

Tabla 5. *Resultados de análisis de regression jerarquica (artículo 3).*

	Salario		Satisfacción con la carrera	
	β	ΔR^2	β	ΔR^2
Paso 1: Inteligencia general		.00 (p = .89)		.00 (p = .93)
Inteligencia general	.01		.01	
Paso 2: Factores de personalidad		.11 (p = .06)		.08 (p =.17)
Inteligencia general	-.05		-03	
Neuroticismo	-.23*		-.06	
Extraversion	.04		.11	
Apertura	-.21*		-.24*	
Amabilidad	-.01		.08	
Responsabilidad	.11		.13	
Paso 3: Interacciones		.11** (p = .00)		.09* (p = .03)
Inteligencia general	.03		.04	
Neuroticismo	-.29**		-.11	
Extraversion	.03		.11	
Apertura	-.25*		-.27*	
Amabilidad	-.00		.08	
Responsabilidad	.09		.12	
Responsabilidad x Inteligencia general	-.29*		-.30*	
Neuroticismo x Inteligencia general	-.23*		-.20	
Apertura x Inteligencia general	-.22*		-.15	
Total R^2		.22		.17

N =103. Cambio en R^2 está basado en R^2 ajustado. *p<.05 **p<.01

Estos resultados, que muestran el efecto moderador de la inteligencia sobre las variables de personalidad a la hora de predecir el salario y la satisfacción con la carrera, son consistentes con resultados reportados por O'Reilly y Chatman (1994) para una muestra similar, aunque en su caso la asociación fue positiva al contrario que en nuestro caso.

Lo que muestran estos resultados es que la relación entre los rasgos de personalidad y el éxito profesional al inicio de la carrera profesional, no es la misma para todos los niveles de inteligencia, sino que esta relación cambia en función del nivel de inteligencia de los empleados.

La forma y significado de la interacción muestra que en el caso de *Responsabilidad x Inteligencia general*, la primera se convierte en un fuerte predictor del éxito en la carrera conforme decrece el nivel de IG. La

Responsabilidad está relacionada positivamente con el salario y la satisfacción con la carrera en aquellos con menor nivel de IG (figuras 4 y 5).

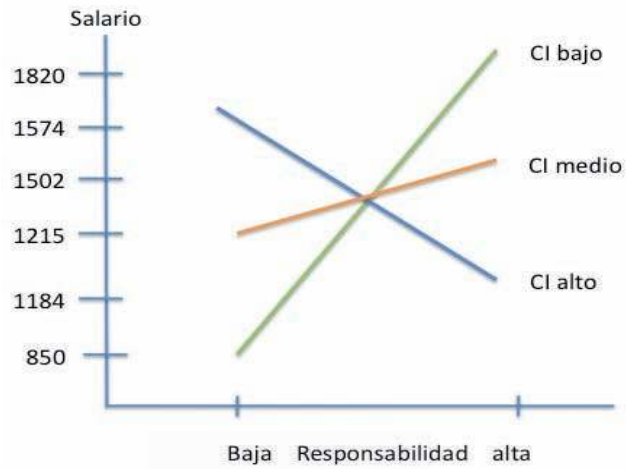

Figura 4. Interacción entre Responsabilidad e inteligencia general sobre salario (artículo 3).

En individuos con *inteligencia media*, la relacion es ligeramente positiva: conforme aumenta la Responsabilidad mejora el salario. En los individuos con un nivel bajo de inteligencia, un alto nivel de Responsabilidad les lleva a obtener, por término medio unos mayores ingresos que los individuos con un alto nivel de inteligencia y alta Responsabilidad. Los empleados con menor inteligencia obtienen, por tanto, un mayor salario si son más tenaces, autodiciplinados, organizados y metódicos.

Para niveles medio-altos de inteligencia, tener mayor o menor Responsabilidad no influye en el salario. Aunque conforme aumenta el nivel de Responsabilidad en los individuos con mayor inteligencia, baja el nivel de salario obtenido, hasta los 1200 euros aproximadamente, esta relación no llega a ser estadísticamente significativa.

Relaciones semejantes se observan cuando se toma como criterio la satisfacción con la carrera (figura 5). Los individuos más satisfechos, son aquellos con mayor nivel de Responsabilidad que están en el grupo con bajo nivel de inteligencia, mientras que los de alto nivel de inteligencia con mayor nivel de Responsabilidad se muestran menos satisfechos. Una posible

explicación podría ser que los individuos más satisfechos lo están por haber obtenido un mayor salario debido a su esfuerzo, lo que estaría apoyado por la alta correlación entre salario y satisfacción.

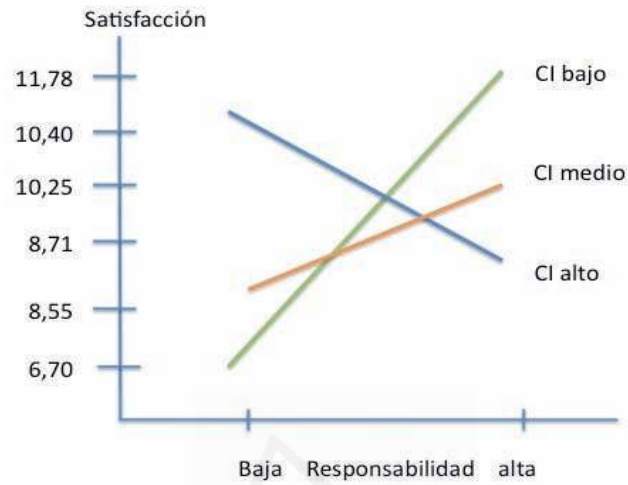

Figura 5. Interacción entre Responsabilidad e inteligencia general en la predicción de la satisfacción con la carrera (artículo 3).

Estos resultados van en la línea de los encontrados por Coté y Miners (2006), en relación a los efectos de la IE en el rendimiento, quienes establecen que conforme la capacidad cognitiva decrece, la relación entre IE y el rendimiento aumenta, lo que significa que el esfuerzo puede compensar bajos niveles de habilidad mental. Sin embargo, los resultados no son consistentes con los resultados obtenidos por Rode y cols., (2008), ni con los de Chamorro-Premuzic y Arteche (2008), quienes establecen que los efectos de la Responsabilidad en los resultados laborales son independientes de la habilidad intelectual.

Para el factor Neuroticismo, los resultados indicaron una relación negativa entre Neuroticismo y salario en los grupos de *inteligencia alta y media,* lo que puede significar que los empleados con inteligencia media obtienen un salario mayor si son menos neuróticos, es decir, más estables emocionalmente, menos ansiosos, menos impacientes y menos preocupados. En los individuos con menor nivel de inteligencia, el Neuroticismo no está asociado al salario.

Finalmente, y con respecto al factor Apertura, los resultados indican una relación negativa entre Apertura y salario para aquellos con *inteligencia alta y media,* lo que significa que los empleados con un nivel de inteligencia media a alta consiguen una mayor salario si su rango de intereses es más limitado, es decir, si son menos soñadores, idealistas e imaginativos. Al igual que con Neuroticismo, un alta puntuación de este factor afectaría negativamente sólo a partir de determinado nivel de IG, por debajo del cual no afectaría. Tener un nivel bajo de inteligencia no influye de manera significativa en el criterio. Llama la atención la semejanza entre las pendientes de Neuroticismo y Apertura.

Por último, indicar que los efectos del Neuroticismo x IG y de Apertura x IG sobre la satisfacción con la carrera no fueron significativos.

En *quinto lugar,* los resultados indican que sólo la regulación emocional (TMMS control), y la percepción emocional (TMMS atención) están relacionadas significativamente con salario la primera y con el nivel del puesto la segunda, lo que hace que la Hipótesis 5: *Las dimensiones de inteligencia emocional percibida (percepción, comprensión y regulación emocional), hacen una contribución significativa a la predicción del éxito profesional extrínseco (salario y nivel del puesto),* se cumpla sólo parcialmente (tablas 6 y 7).

La dimensión TMMS control, representada por aspectos como "*tener una visión optimista, pensar en cosas agradables, tener pensamientos positivos o preocuparse por mantener un buen estado de ánimo*", está relacionada con el nivel salarial conseguido. Estos resultados refuerzan la importancia del papel de la regulación emocional en el éxito profesional, importancia que ha sido puesta de manifiesto con respecto a otros criterios como el desempeño en la tarea (Law y cols., 2004), la autoeficacia emprendedora (Salvador, 2008) o la satisfacción vital (Extremera y Berrocal, 2005). Estudios que han utilizado otras medidas de inteligencia emocional como el MSCEIT (Lópes y cols., 2004; Sevinc, 2001), muestran también correlaciones significativas entre la dimensión de "*gestión de emociones"* y el nivel salarial.

Para el nivel del puesto, la existencia de una relación significativa negativa entre el criterio y la dimensión de IE TMMS atención, descrita por

ítems como "*Pongo mucha atención a mis sentimientos*", podría ser explicada por el impacto negativo que tiene la atención excesiva en las emociones propias en los resultados laborales y por tanto en las promociones recibidas.

Por último, la dimensión TMMS claridad, descrita por indicadores como "*tener claros los sentimientos, ser capaz de definirlos, conocer como se siente uno y entender sus emociones*", no parece estar asociada a ninguno de los criterios, en contra de resultados que sí muestran asociaciones entre esta dimensión y otros criterios (Extremera y Fernández-Berrocal, 2005; Salovey y cols., 1995).

De los resultados de éste trabajo, se desprende también que los predictores del salario y del nivel del puesto y satisfacción con la carrera, son distintos: TMMS control pesa más en el salario y TMMS atención, pesa más para el nivel del puesto.

Por otro lado, la ausencia de correlación obtenida en nuestros datos entre IG e IE, consistente con los resultados obtenidos en otros estudios (Davies, Stankov y Roberts, 1998; Derksen y cols., 2002; Fox y Spector, 2000), refuerza la validez diferencial de la IE.

En *sexto lugar*, los resultados muestran que la inteligencia emocional contribuye, más allá de la inteligencia general, al nivel de salario obtenido, mientras que esta contribución no llega a ser significativa para el nivel ocupacional conseguido. Por ello, la Hipótesis 6: *Las dimensiones de inteligencia emocional percibida (percepción, comprensión y regulación emocional), hacen una contribución significativa a la predicción del éxito profesional extrínseco (salario y nivel del puesto) más allá de lo que lo hace la inteligencia general*), se confirma parcialmente (Tabla 6).

Tabla 6. *Resultados de análisis de regresión jerárquica (artículo 1).*

	Salario		Nivel del puesto	
	β	ΔR^2	β	ΔR^2
Paso 1: Covariables		.02		.05
Sexo	-.13		-.23*	
Edad	-.05		-.03	
Paso 2: Inteligencia general		.00		.00
Sexo	-.13		-.23*	
Edad	-.05		-.25	
Inteligencia general	.01		.02	
Paso 3: Inteligencia emocional percibida		.12 **		.06
Sexo	-.15		-.24*	
Edad	-.06		-.05	
Inteligencia general	-.01		.02	
TMMS atención	-.18		-.21*	
TMMS claridad	.19		.07	
TMMS control	.20*		.14	
R^2 total		.14		.11

N =103. Cambio en R^2 está basado en R^2 ajustado. *p<.05 **p<.01

Aunque esta hipótesis sólo se ve parcialmente confirmada, proporciona apoyo a los estudios que encuentran validez incremental de la inteligencia emocional sobre las habilidades cognitivas (Law y colaboradores, 2008), estando en desacuerdo con otros que no apoyan esta relación (Rode y cols., 2008). Este incremento en varianza proporcionado por las dimensiones de la inteligencia emocional percibida para el salario (12%), es ligeramente superior al obtenido en otros estudios (Bastian y cols., 2005; Law y cols., 2004).

El mayor poder predictivo de la inteligencia emocional sobre la inteligencia general, posiblemente esté situado en los propios requerimientos asociados a las responsabilidades de los puestos. El desempeño positivo en el trabajo depende, en muchos casos, del apoyo, asesoramiento y recursos proporcionados por otros (Seibert, Kraimer y Liden, 2001). Para conseguir esta ayuda, es fundamental contar con determinadas competencias socio-emocionales que contribuyan al desempeño laboral, permitiendo a las personas regular sus emociones para enfrentarse al estrés de manera eficaz, trabajar bien bajo presión, ajustarse al cambio organizacional, conseguir unas mejores

relaciones en el trabajo, trabajar mejor en equipo y construir capital social (Lópes, y cols., 2006).

En *séptimo lugar*, los resultados señalan que la IE explica parte de la varianza en salario, pero no de la satisfacción con la carrera, una vez controlada la inteligencia y la personalidad, por lo que la Hipótesis 7: *Las dimensiones de inteligencia emocional percibida (percepción, comprensión y regulación emocional), hacen una contribución significativa a la predicción del éxito profesional extrínseco (salario) e intrínseco (satisfacción con la carrera), más allá de lo que lo hace la inteligencia general y la personalidad*), se confirma parcialmente (Tabla 7).

Tabla 7. Resultados de análisis de regresión jerárquica (artículo 2).

	Salario		Satisfacción con la carrera	
	β	ΔR^2	β	ΔR^2
Paso 1: Inteligencia general		.00 (p = .89)		.00 (p = .93)
Inteligencia general	.01		.01	
Paso 2: Factores de personalidad		.11 (p = .06)		.08 (p =.17)
Inteligencia general	-.05		-03	
Neuroticismo	-.23*		-.06	
Extraversion	.04		.11	
Apertura	-.21*		-.24*	
Amabilidad	-.01		.08	
Responsabilidad	.11		.13	
Paso 3: Inteligencia emocional percibida		.09* (p = .03)		.06 (p = .11)
Inteligencia general	-.02		-.03	
Neuroticismo	.00		.07	
Extraversion	-.03		.11	
Apertura	-.30**		-.33**	
Amabilidad	.01		.10	
Responsabilidad	.04		.11	
TMMS atención	-.12		-.06	
TMMS claridad	.18		-.09	
TMMS control	.30*		.33**	
R^2 Total		.20		.14

N =103. Cambio en R^2 está basado en R^2 ajustado. *p<.05 **p<.01

De las dimensiones de IE, solo la dimensión de IEP TMMS control, contribuye más allá de la habilidad mental general y de los factores de personalidad al nivel salarial al comienzo de la carrera profesional, lo que sirve de evidencia sobre la *especifidad predictiva* de las dimensiones de la IE, frente a su validez generalizada, al no reforzar hallazgos que han mostrado que las otras dimensiones de la IE, como *claridad*, tienen validez incremental sobre la

inteligencia y la personalidad para otros criterios como la satisfacción con la vida (por ejemplo, Extremera y Fernández-Berrocal, 2005; Palmer, Donaldson y Stough, 2002; Salovey, y cols., 1995).

En *octavo lugar*, los resultados muestran que el salario es predicho *directamente* por la dimensión de IE TMMS control (positivamente) y por el factor de personalidad Apertura (negativamente), e *indirectamente* por los factores Neuroticismo (positiva y negativamente), Extraversión (positivamente) y Apertura (positivamente), vía dimensiones de la IE. Se prueba tambien, que los efectos indirectos de la personalidad son mayores que los directos y se producen a través de las dimensiones de la IE, que se relacionan entre ellas y el criterio, siguiendo la cadena causal: *percepción, comprensión y regulación emocional*, de acuerdo con el modelo propuesto por Joseph y Newman, (2010), conocido como "Cascading Model", lo que hace que la Hipótesis 8*: Las dimensiones de inteligencia emocional percibida (percepción, comprensión y regulación emocional), median en la relación entre factores de personalidad y criterios de éxito extrínseco (salario), se* confirme para algunos de los factores de personalidad (figura 6).

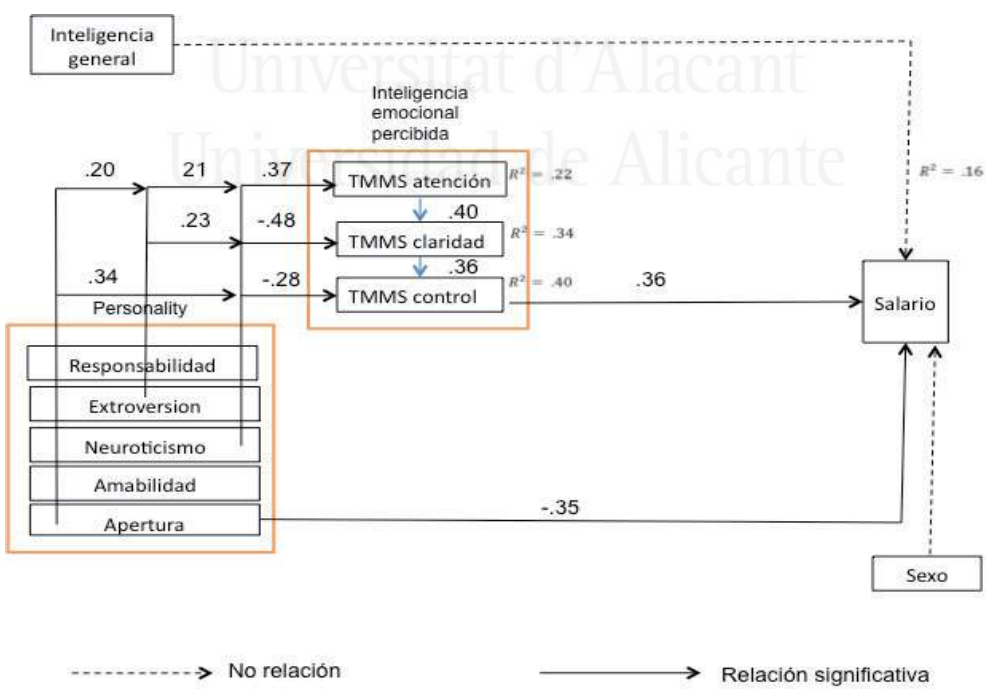

Figura 6. Resultados del path analisis (artículo 4).

Con respecto a las *influencias directas*, los resultados para *TMMS control,* refuerzan la importancia de la autoregulación emocional en diferentes contextos. Estos hallazgos, en línea con otros trabajos que sugieren que la habilidad para manejar las emociones y controlar el estado de ánimo es uno de los predictores más fuertes del desempeño laboral (Fisher y Ashkanasy, 2000; Kluemper, De Groot, y Choi, 2013), de forma que los individuos que muestran una mayor capacidad para sobreponerse a los acontecimientos negativos, tienen una visión más optimista, intentan pensar en cosas más agradables y mantienen un estado de ánimo positivo, conseguirán mayores niveles de ganancias individuales en su carrera en las fases iniciales.

La importancia de esta dimensión (conocida también como *emotion management ability*), como predictor del desempeño, ha sido puesta de manifiesto en estudios que avalan su validez incremental (Gannon y Ranzijn, 2005; Kluemper y cols., 2013), sirviendo este hecho de apoyo a propuestas de investigación orientadas más al análisis de dimensiones específicas de la IE que a la evaluación del impacto de medidas generales de IE, estudios estos últimos, que parecen haber aportado resultados poco concluyentes (Rode y cols., 2008).

Para la justificación de la influencia directa encontrada para el factor Apertura, sirven los argumentos proporcionados en la explicación hecha más arriba de la hipótesis 2.

En resumen, las influencias directas sugieren que *una apertura baja y una mayor regulación emocional,* determinan mayores salarios.

En relación al efecto mediador de la inteligencia emocional y sus dimensiones, mostrado por las *influencias indirectas* entre determinados factores de personalidad y el criterio, los resultados ponen de manifiesto que TMMS atención, media los efectos de los factores Neuroticismo, Extraversión y Apertura sobre el salario; TMMS claridad, media los efectos de los factores Neuroticismo y Extraversión y TMMS atención sobre el salario y TMMS control, media el efecto de los factores Neuroticismo, Apertura y TMMS

claridad sobre el salario. Por tanto, se producen los efectos indirectos planteados y aparecen también otros no previstos.

En cuanto a los *predictores* que manifestaron efectos indirectos, Neuroticismo, fue el único factor de personalidad con efectos en las tres dimensiones de IE. Los resultados muestran, sin embargo, que la relación entre Neuroticismo y TMMS atención es positiva, al contrario de lo planteado en la hipótesis, de manera que un mayor nivel de Neuroticismo, es decir, una menor estabilidad emocional, no sólo no parece perjudicar a la capacidad de prestar atención a las emociones, sino que incluso la potencia, lo que va en contra de lo planteado por autores como Law y cols., (2004), pero en consonancia con estudios que indican relaciones positivas entre Neuroticismo y atención a los sentimientos (Extremera y Fernández-Berrocal, 2005).

Para poder dar una explicación más precisa de estos resultados aparentemente contradictorios, deberíamos tener en cuenta el posible impacto de *factores situacionales* como el nivel de presión de la situación, que podría actuar como moderador del nivel de ansiedad de los sujetos, de forma que si la situación no es muy estresante, un nivel de ansiedad alto en los sujetos, no perjudique tanto al proceso de atención de las emociones, como cuando el nivel de estrés de la situación es alto, de acuerdo con la ley de Yerkes y Dodson. El carácter menos cognitivo de esta dimensión (a diferencia de, por ejemplo, la claridad emocional), y su activación de una manera más automática y menos consciente - ver relación negativamente significativa con Responsabilidad en el trabajo de Fiori - (2009), la haría menos sensible a la influencia de la ansiedad.

Por su parte, las relaciones negativas puestas de manifiesto entre Neuroticismo y TMMS claridad (no prevista en las hipótesis) y entre Neuroticismo y TMMS control, están en la línea de las relaciones encontradas en otros trabajos (Ciarrochi, Chan y Caputi, 2000; Extremera y Fernández-Berrocal, 2005; Freudenthaler y Neubauer, 2005; García-Izquierdo y cols., 2007; Schulte y cols., 2004; Van der Zee y cols., 2002; Van Rooy y Viwesvaran, 2004; Warnick y Nettelbeck, 2004), que dejan claro que un nivel de estabilidad emocional bajo dificulta la capacidad para comprender y regular las emociones,

lo que implicaría que un nivel bajo de Neuroticismo conducirá a una mayor claridad emocional, a una mayor regulación emocional y a un mayor salario.

En el caso de la Extraversión, aunque no tuvo impacto directo en ninguno de los criterios, este factor afecta indirectamente al salario vía relación positiva con TMMS atención (iniciando el proceso de activación de la claridad y regulación emocional en cascada) y con TMMS claridad.

La primera de las relaciones (extraversión con TMMS atención), sugiere (de acuerdo con la teoría de Frederikson´s, 2001), que los extravertidos poseen repertorios conductuales más amplios que mejoran la flexibilidad conductual e incrementan el campo de la atención. Su mayor desempeño en tareas que requieren atención dividida, mayor amplitud y rapidez, reflejaría un patrón de actuación similar al comentado anteriormente para el caso de Neuroticismo, sustentado también por la diferenciación entre los tipos de pensamiento rápido (más asociado a la extraversión) y lento propuestos por Kahneman (2011).

En la segunda de las relaciones, Extraversión con TMMS claridad, la influencia observada de la Extraversión con la claridad de los sentimientos, va en la línea de los hallazgos de autores como Van der Zee y cols., (2002), Van Rooy y Viswesvaran (2004) o Warwick y Nettelbeck (2004), lo que pone de manifiesto la importancia que tienen la sociabilidad y positividad asociada a este factor en los procesos de conocimiento y comprensión emocional. Para entender estos resultados, puede ser útil recurrir a la diferenciación que establece Hogan (1986) entre dos subcategorías dentro de este factor: *sociabilidad y ambición*, de forma que algunos sujetos extravertidos destacarían más en la búsqueda de relaciones mientras otros en la ambición, dominancia y confianza en sí mismos. Para estos últimos, tener una mayor comprensión de sus emociones, podría ser más relevante que para los primeros.

El tercer factor de personalidad que muestra influencia indirecta sobre el salario vía inteligencia emocional es *Apertura*. Su relación positiva con TMMS atención, da apoyo al planteamiento que conecta curiosidad y deseo de nuevos estímulos y sensaciones nuevas con la atención a los sentimientos internos. La relación encontrada, significativa y positiva, no prevista con TMMS control es

consistente con los hallazgos de Van Rooy y Viswesvaran (2004), apuntando a una posible conexión entre aspectos asociados a una mayor Apertura, como entusiasmo, positividad y flexibilidad, y la auto-regulación emocional, que conduce a un mayor salario. La diversidad de los propios elementos, que como acabamos de comentar, componen este factor, cuyo significado no está aun suficientemente claro, o el hecho de que las propias dimensiones de la inteligencia emocional puedan actuar como filtro moderador, no sólo mediador, podría explicar también el sentido inverso de la influencia directa (negativa) e indirecta (positiva) de Apertura, sobre el criterio.

Por último, los resultados muestran el siguiente orden en la conexión causal de las dimensiones de la IE: *la percepción y atención a las emociones, precede a la compresión e interpretación de las mismas, que a su vez incide en la regulación emocional*, como paso previo a su impacto en el criterio. Es importante determinar el rol y los criterios de funcionamiento que cada una de las tres dimensiones de la IE tienen en el proceso de mediación. En este sentido, el hecho de que cualquiera de ellas pueda actuar como vía de entrada de una variable predictora, de que tenga que haber al menos una que entre por TMMS atención para iniciar el proceso, y que sólo sea la dimensión TMMS control la que esté directamente conectada con el criterio, como enlace final y puerta de salida de los efectos de los predictores sobre el criterio, además de que por supuesto estén enlazadas en forma de cascada causal, tal y como se muestra en los resultados, sirven de prueba de cumplimiento del modelo en el que basamos esta parte del trabajo ("Cascading Model" de Joseph y Newman, (2010).

En resumen, los resultados muestran la importancia del *efecto mediador de la IE en la influencia de la personalidad sobre criterios de éxito extrínseco (salario), al inicio de la carrera profesional*. Los factores Neuroticismo, Extraversion y Apertura, cuya combinación es asimilable al concepto de "Personalidad Positiva" (Lyubomirsky y cols., 2005), ejercen una influencia indirecta mayor que la directa, e intervienen iniciando un proceso de activación emocional en cascada que lleva a los sujetos a *pensar, sentir y actuar* de forma que construyen recursos y se implican en la consecución de metas que les permite alcanzar el

éxito. Como establecen Tett y Burnett, (2003), en su "Trait Activation Theory", determinados factores de personalidad, como los que se incluyen en este estudio, pueden ser activados en situaciones que proporcionan oportunidades para que sean reforzados. Las demandas al inicio de la carrera, distintas posiblemente de las que se producen conforme se avanza en la trayectoria profesional individual, pueden actuar como activadores de estos factores que como hemos visto, actuan a través de dimensiones de la inteligencia emocional en una proceso de conexión causal en cascada que se materializa a través del impacto de la regulación emocional como via de salida hacia un comportamiento que conduciría a los sujetos a esforzarse, a ser reforzado por los empleadores y a obtener mayores ingresos. Los estados de ánimo positivo y el rendimiento en la tarea están relacionados. En esta relación, la supresión de emociones negativas que consumen recursos cognitivos que son necesarios para el desempeño laboral, podría explicar, el efecto positivo de la IE (Tsai, Chen, y Liu, 2007).

En la tabla que sigue, presentamos un resumen de los resultados de los trabajos incluidos en la tesis ordenados por hipotesis.

Tabla 8. *Resultados de los trabajos por hipotesis.*

Hipótesis	Artículos	Resultado
Hipótesis 1 Inteligencia general (relación positiva) Variables dependientes: salario y nivel del puesto. Variable dependiente: satisfacción con la carrera.	**nº 1** **nº 2, 3 y 4**	No se confirma No se confirma
Hipótesis 2 Personalidad: Responsabilidad y Extraversión (relación positiva) Personalidad: Neuroticismo, Amabilidad y Apertura (relación negativa) Variables dependientes: salario y satisfacción con la carrera.	**nº 3** **nº 4**	Confirmación parcial (Neuroticismo, solo salario y Apertura todos).
Hipótesis 3 Validez incremental Personalidad sobre inteligencia general Variables dependientes: salario y satisfacción con la carrera.	**nº 2** **nº 3**	No se confirma.
Hipótesis 4 Interacción entre Personalidad (Responsabilidad, Neuroticismo y Apertura) e inteligencia general. Variables dependientes: salario y satisfacción con la carrera.	**nº 3**	Sí se confirma, parcialmente para salario no para satisfacción.
Hipótesis 5 Inteligencia emocional percibida (percepción, comprensión y regulación emocional), relación positiva. Variables dependientes: salario, nivel del puesto y satisfacción con la carrera.	**nº 1** **nº 2**	Confirmación parcial (Sólo regulación emocional para salario y percepción para nivel del puesto)
Hipótesis 6 Validez incremental Inteligencia emocional percibida (percepción, comprensión y regulación emocional), sobre inteligencia general. Variables dependientes: salario y nivel del puesto.	**nº 1**	Se confirma parcialmente, para salario, no para nivel del puesto
Hipótesis 7 Validez incremental Inteligencia emocional percibida (percepción, comprensión y regulación emocional), sobre inteligencia general y personalidad. Variables dependientes: salario y satisfacción con la carrera.	**nº 2**	Si para salario, no para satisfacción.
Hipótesis 8 Inteligencia emocional percibida (percepción, comprensión y regulación emocional), efecto mediador entre personalidad e ingresos. Variable dependiente: salario.	**nº 4.**	Sí se confirma para algunos de los factores de personalidad.

4.3. Conclusiones.

4.3. Conclusiones.

El análisis de los resultados y la reflexión sobre la justificación de los mismos, nos permite plantear las siguientes conclusiones que expresamos como síntesis de los hallazgos de esta colección de trabajos, en dos partes. Una primera parte, que recoje derivaciones específicas agrupadas por el tipo de predictor al que hacen referencia, y una segunda, que incluye de forma resumida sus aspectos más destacables, sus limitaciones, y sus implicaciones generales.

Con respecto a las *conclusiones específicas*, se establecen las siguientes.

a. *Inteligencia general*.

No se relaciona con ninguno de los criterios de éxito profesional operativizados (salario, nivel del puesto y satisfacción con la carrera), al inicio de la carrera, ni directa ni indirectamente. Ello, deja abierta la puerta a la intervención de otro tipo de variables en la adquisición y aplicación de los conocimientos y/o habilidades responsables del éxito en este momento de la etapa profesional de los egresados.

b. *Personalidad*.

- Tomada en su conjunto, *no aporta validez incremental* sobre la Inteligencia general, a la hora de predecir el éxito profesional al inicio de la carrera profesional, tomando como criterios el salario y la satisfacción con la carrera. Esto deja tambien la puerta abierta a otro tipo de variables, aunque los valores tan ajustados de la probabilidad para la confirmación de la hipótesis nula, no descartan su inclusión como predictor relevante para este tipo de criterios; influencia y significación que debe ser analizada en un nuevo contexto de investigación.

- Los factores de personalidad más importantes para predecir el éxito profesional al inicio de la carrera son: *Apertura*, con respecto a los criterios salario y satisfacción con la carrera, y *Neuroticismo* con respecto al salario, en ambos casos con relaciones negativas. Estos factores ejercen una influencia directa en los criterios señalados, pero tambien y junto al factor *Extraversión*, ejercen una influencia indirecta en el criterio de éxito extrínseco salario a través de las dimensiones de inteligencia emocional. La importancia de la estabilidad emocional, de la sociabilidad y de estar centrado sin perder la flexibilidad para conseguir mayores ganancias al inicio de la carrera, queda clara en este estudio. Conviene analizar en futuros estudios la no significación de factores tan relevantes hasta ahora como la *Responsabilidad*.

c. *Inteligencia general y Personalidad.*

- Aunque ni la inteligencia general ni la personalidad como un todo, de forma aislada poseen validez predictiva sobre los criterios, la interacción entre la inteligencia general y algunos de los factores de personalidad, *Responsabilidad, Neuroticismo y Apertura)*, aporta validez incremental en la explicación del éxito extrínseco e intrínseco al inicio de la carrera. La inteligencia, actúa como *variable moderadora* de los tres factores de personalidad en el caso del salario y de la Responsabilidad en el caso de la satisfacción con la carrera, lo que prueba el efecto compensatorio que puede tener la Responsabilidad ante niveles bajos de inteligencia; el efecto de mayor interferencia del Neuroticismo ante niveles altos de inteligencia y el efecto selectivo de la Apertura ante niveles mayores de inteligencia, en la producción de un mayor éxito en la carrera.

d. Inteligencia emocional.

- Aporta *validez incremental* sobre la inteligencia general (12%) a la hora de explicar la varianza en el éxito profesional al inicio de la carrera para el criterio salario. Este mayor poder predictivo, posiblemente esté situado en los propios requerimientos asociados a las responsabilidades de los puestos, que en muchos casos pasan por conseguir el apoyo, asesoramiento y recursos proporcionados por otros, tarea que puede ser facilitada si se tiene una mejor comprensión y regulación de las emociones.

- Aporta tambien *validez incremental* sobre la inteligencia general y personalidad, a la hora de explicar la varianza en el éxito profesional al inicio de la carrera para el criterio salario (9%), aunque no tanta como la interacción entre factores de personalidad e inteligencia general (11%). Estos resultados no ponen en entredicho la validez de constructo de la inteligencia emocional, pero recomiendan un análisis más profundo de sus conexiones tanto directas como indirectas, con los diferentes predictores y criterios de éxito.

- De las dimensiones de Inteligencia emocional, la Regulación Emocional (*TMMS control*) es la que más relación muestra con el éxito profesional al inicio de la carrera, para el criterio salario, seguida de la Percepción Emocional (*TMMS atención*), para el nivel del puesto. Esto pone de manifiesto, que aquellos individuos que muestran una mayor capacidad para sobreponerse a los acontecimientos negativos, una visión más optimista, intentan pensar en cosas más agradables y mantienen un estado de ánimo positivo, conseguirán mayores niveles de ganancias individuales en su carrera en las fases iniciales. También queda claro, el efecto

negativo que tiene la atención excesiva en las emociones propias sobre los resultados laborales.

- La Inteligencia Emocional actúa como variable *mediadora* en la relación *Personalidad–ingresos*, lo que le confirma su carácter de variable más proximal en la cadena de conexión causal predictores–criterio y la importancia de la activación emocional en la construcción de los recursos necesarios para la consecucuñon de las metas profesionales.

- La influencia de los factores de personalidad, se produce de manera indirecta vía dimensiones de inteligencia emocional siguiendo el *modelo en cascada* de Joseph y Newman (2010), que establece que la conexión entre las dimensiones de la IE, se produce de acuerdo con el orden siguiente: *percepción, comprensión y regulación de las emociones.* La interpretación y el significado de esta evidencia, pone de manifiesto que sin una adecuada percepción y comprensión de las emociones, no es posible que se den las conductas adecuadas para regularlas, lo que sirve de apoyo a la conceptualización de las dimensiones de la IE como partes relacionadas de un constructo que las engloba.

- Los resultados de este trabajo, sirven de apoyo a propuestas de investigación que recomiendan realizar *análisis de dimensiones específicas* de la Inteligencia Emocional más que la evaluación del impacto de medidas generales de la Inteligencia Emocional (Kluemper y cols., 2013).

Como resumen de las anteriores conclusiones específicas, podemos decir que *la interacción de los factores de personalidad Responsabilidad, Neuroticismo y Apertura con la inteligencia general*, es la que proporciona una mayor explicación de la variabilidad del salario como criterio de éxito extrínseco al inicio de la

carrera profesional. A continuación, la inteligencia emocional, es la variable que aporta validez incremental sobre la inteligencia general y personalidad, que por si solas de manera general y tomadas por separado, no se relacionan significativamente con los criterios.

Como *conclusión general* podemos afirmar, que las *relaciones* entre los predictores y los criterios de éxito profesional no son simples ni directas, sino *complejas*, admitiendo efectos indirectos, mediaciones e interacciones entre los diferentes tipos de predictores a la hora de predecir los criterios. En la determinación del tipo de relaciones, influyen el tipo de criterio, cómo se ha mostrado, por ejemplo, en las mayores correlaciones encontradas entre los factores disposicionales y los criterios de éxito subjetivos que entre estos factores y los criterios de éxito objetivos (Ng y cols., 2005), el tipo de muestras, el momento y el tipo de análisis de los datos que se hagan fruto de los objetivos perseguidos por los investigadores.

Entre los aspectos relevantes, que hacen este trabajo de *interés para la comunidad científica,* destacamos: el hecho de que sea la primera vez que se miden las relaciones entre las variables individuales planteadas como independientes y el éxito profesional tanto extrínseco como intrínseco al inicio de la carrera profesional (las repercusiones de los logros obtenidos en estas primeras etapas son vitales para garantizar una trayectoria profesional adecuada); estar basado en datos longitudinales de titulados egresados; e incluir tanto los efectos directos, indirectos e interacciones en los análisis para detectar nuevas asociaciones significativas para predecir los criterios de éxito.

Asímismo, de los resultados de estos trabajos, se derivan una serie de *implicaciones* prácticas, que permitirían afinar en los procesos de *selección de personal*, y servir como base para el *desarrollo de acciones formativas* sobre competencias socio-emocionales dirigidas a estudiantes universitarios. Entre las primeras, incluir por ejemplo, la variable IE en las pruebas de selección de personal para el acceso a puestos de titulados junior en las organizaciones,

dado que esta variable no suele medirse en dichos procesos. Con respecto a las segundas, recomendamos desde aquí, incluir en los programas académicos de grado, la *realización obligatoria de asignaturas* que incluyan el trabajo con competencias socio-emocionales; su evaluación en la realización de *proyectos multidisciplinares* y la posibilidad de formar parte de *programas de postgrado* para profundizar en su mejora y desarrollo. Desde el punto de vista de la *orientación profesional*, es conveniente contemplar la evaluación de la IE a la hora de aconsejar sobre la elección de itinerarios profesionales. Para todo esto es fundamental comenzar por la *concienciación y formación del profesorado* en herramientas de evaluación y desarrollo de la inteligencia emocional, que sin duda contribuirá a que sean más eficaces como formadores.

Con respecto a las *limitaciones* de este conjunto de estudios, destacamos como más relevantes: la posibilidad de error de especificación del modelo, que pudiera producirse por la actuación de variables no incluidas en los modelos; el tamaño de la muestra final, que podría carecer del poder suficiente para corroborar la significación estadística de las relaciones especialmente con análisis de regresión múltiple (Aguinis, 1995); y la dificultad de desagregar en sub muestras por área de estudios que permita hacer comparaciones en las variables de interés entre los grupos de egresados.

Por último, es necesario volver a replicar estos resultados para poder estar más seguros de la validez de los efectos. Para *futuras investigaciones,* se recomienda ampliar el número y tipo de predictores incluidos, por ejemplo variables de sistema (entorno), como el carácter emocional o no de los trabajos; tener en cuenta otras medidas de IE (como por ejemplo de habilidad o competencias); considerar las muestras en diferentes momentos de la carrera profesional para valorar los efectos de la experiencia; analizar la influencia de variables mediadoras adicionales (por ejemplo de tipo motivacional); y explorar las relaciones tanto directas como indirectas entre las diferencias individuales y el éxito en la carrera para diferentes tipos de criterios.

5. Referencias.

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6. Anexos.

Anexo 1: Ítems utilizados del cuestionario de inserción.

Anexo 2: Artículo en revisión.

De Haro, J.M.; Castejón, J. L. & Gilar, R. **Personality effects in Early Career Success: the Mediating Effect of Emotional Intelligence.**

Anexo 1. Ítems extraídos del cuestionario de inserción laboral utilizados como criterios.

Ítem 23. ¿Cuál es tu ocupación o puesto actual?.

__ Miembro del poder ejecutivo y de los cuerpos legislativos y personal directivo de la administración pública.

__ Director de empresa.

__ Gerente de empresa.

__ Profesional de nivel superior de ciencias biológicas, medicina y salud.

__ Profesional de nivel superior de ciencias físicas, químicas, matemáticas y de la ingeniería.

__ Profesional de nivel superior de la enseñanza.

__ Otros profesionales científicos e intelectuales.

__ Técnico y profesional de nivel medio de ciencias físicas y químicas, ingenierías y afines.

__ Técnico y profesional de nivel medio de ciencias biológicas, medicina y salud.

__ Maestros e instructores de nivel medio.

__ Otros técnicos y profesionales de nivel medio.

__ Oficinista.

__ Empleado en trato directo con el público.

__ Trabajador de servicios personales, protección y seguridad.

__ Modelos, vendedores y demostradores.

__ Agricultor y trabajador cualificado de explotaciones agropecuarias, forestales y pesqueras con destino al mercado.

__ Trabajador agropecuario y pesquero de subsistencia.

__ Oficial y operario de la industria extractiva y de la construcción.

__ Oficial y operario de la metalurgia, mecánica y afines.

__ Mecánico de precisión, artesano, operario de artes gráficas y afines.

__ Otros oficiales, operarios y artesanos de artes mecánicas y de otros oficios.

__ Operador de instalaciones fijas y afines.

__ Operador de máquinas y montadores.

__ Conductor de vehículos y operador de equipos pesados móviles.

__ Trabajador no cualificado de venta y servicios.

__ Peón agropecuario, forestal, pesquero y afines.

__ Peón de la minería, construcción, industria manufacturera y del transporte.

__ Fuerzas armadas.

Ítem 26. ¿Cuál es tu sueldo bruto mensual?.

__ Menos de 600 euros.

__ Entre 600 y 1000 euros.

__ Entre 1000 y 1200 euros.

__ Entre 1200 y 1500 euros.

__ Entre 1500 y 1800 euros.

__ Entre 1800 y 2000 euros.

__ Más de 2000 euros.

Ítem 30. ¿Hasta qué punto tu actual situación laboral coincide con las expectativas que tenías cuando empezaste los estudios?.

Nada (1), poco (2), algo (3), bastante (4), mucho (5).

Ítem 37. Valorando tu trayectoria profesional consideras que es:

Muy Negativa (1), negativa (2), punto medio (3), positiva (4), muy positiva (5).

Ítem 39. En general, ¿en qué grado estás satisfecho con tu trabajo actual?.

Muy insatisfecho (1), insatisfecho (4), punto medio (3), satisfecho (4), muy satisfecho (5).

Anexo 2: Artículo en revisión.

De Haro, J.M.; Castejón, J. L. & Gilar, R. **Personality effects in Early Career Success: the Mediating Effect of Emotional Intelligence.**

Personality effects in Early Career Success: the Mediating Effect of Emotional Intelligence

Authors: Jose Manuel de Haro García, Juan Luis Castejón Costa and Raquel Gilar Corbi.

Abstract:

This paper looks at the direct and indirect effects of general mental ability (GMA), personality traits (Big Five model) and Emotional intelligence (EI) on individual earnings in the early career stage. Also examines the role of Emotional Intelligence as a mediator in the personality earnings relationship. Longitudinal data was collected from a sample selected among a 339 university graduates who were in the early stages of their professional careers. The results of a path analysis indicate that only one of the personality traits (Openness) and one of the EI dimensions (Repair), can directly predict individual earnings longitudinally. Besides this, the effects of some of personality traits (neuroticism, extraversion and openness), over salary were partly mediated by the EI dimensions, following the causal chain: *perception, understanding and emotional regulation*, according to the model suggested by Joseph and Newman (2010). These findings provides support the use of EI measures in personnel selection and have important implications for the development of emotional intelligence as key variable in the final stage of enhancing job performance through emotional competence.

Key words: General mental ability, personality, emotional intelligence, career success, salary.

Introduction.

Although the literature recognizes the validity of predictors of work outcomes, such as general mental abilities (GMA), personality traits and emotional intelligence (EI), defining each of their roles is not an easy task. Aspects such as the type of criteria, the specific way of measuring the predictor, the type of sample or the moment in the professional career in which the data is collected make it difficult to characterize the relationships between predictors and criteria.

An example of the variety of results obtained according to the criteria used in the case of *general mental ability* (GMA) is that some studies show positive relationships between this predictor and criteria such as *job performance* (e.g. Bertua, Anderson & Salgado, 2005; Ng, Eby, Sorensen & Feldman, 2005; Schmidt, & Hunter, 2004), while other studies, which include extrinsic success criteria such as *salary* or *career advancement*, show relationships that range from only slightly to moderately positive (Dreher & Bretz, 1991; Judge, Higgins, Thoreson & Barrick, 1999; Ng et al., 2005).

With regards to *personality traits*, and although there is considerable research that states that they are important variables for predicting *effective performance* in different jobs (Boudreau, Boswell & Judge, 2001), the results also vary according to the type of measurement and criteria used. Thus, if we look at studies that are based on the *Five Factor Model* (see meta-analysis of Ng et al., 2005; Salgado, 1998), their results have shown that *conscientiousness* – with the exception of a few studies which obtained a negative relationship (Boudreau et al., 2001; Gelisson & De Graaf, 2006) – and *extraversion* show a positive relationship with extrinsic criteria such as salary (e.g. Barrick & Mount, 1991; Gelissen & De Graaf, 2006; Judge at al., 1999; Judge & Kammeyer-Mueller, 2010; Rode et al., 2008; Seibert & Kraimer, 2001; Smithikrai, 2007; Sutin, Costa, Miech, & Eaton, 2009), while *neuroticism and agreeableness* correlate negatively with this kind of criteria (e.g. Barrick & Mount, 1991; Boudreau et al., 2001; Dilchert & Ones, 2008; Gelissen & De Graaf, 2006; Judge, Heller & Mount, 2002; Judge & Kammeyer-Mueller, 2010; Ng et al., 2005; Nyhus & Pons, 2005; Rode, Arthaud-Day, Mooney, Near, & Baldwin, 2008; Seibert & Kraimer, 2001; Smithikrai, 2007; Sutin, et al., 2009). On the other hand, the results of studies on *openness* have been inconsistent (Spurk & Abele, 2011). Although there appears to be a positive relationship with job performance, most of the studies have found a negative relationship between openness and salary (Bozionelos, 2004; Gelissen & De Graff, 2006; Seibert & Kreimer, 2001) or no association at all (Barrick & Mount, 1991; Boudreau et al., 2001), while others have found a positive relationship (Palifka, 2009).

The aim of this study is twofold. On the one hand, it seeks to check whether the GMA predictors, personality traits and EI have a direct influence over success in the early career stage. On the other hand, it also aims to verify that EI dimensions intervene as mediator variables in the relationship between personality traits (neuroticism, extraversion and openness) and career success, controlling the effect of general intelligence and sex. Furthermore, we suggest that the mediator effect of EI dimensions takes place following the causal chain established by Joseph and Newman (2010) in their "cascading model", i.e. the "emotional perception" dimension influences the "emotional understanding" dimension, which in turn influences the "emotional regulation" dimension, which is responsible for individual earnings.

Regarding the first of the aims of this study and drawing upon the above theoretical arguments as well as empirical research, we state the following first two hypotheses with the aim to verify relationships between these two important predictors and extrinsic career success:

Hypothesis 1: General mental ability (GMA) is positively directly related to individual earnings.

Hypothesis 2: Personality traits are directly related to individual earnings, whereby conscientiousness (a) and extraversion (b) are positively related with individual earnings, and neuroticism (c), agreeableness (d) and openness are negatively related to individual earnings (e).

This study focuses on individuals' objective career success using monthly salary as the criteria. Salary has been treated as one of the most frequent measures (Judge & Kammeyer-Mueller, 2007) and has been one of the most widely used and readily accessible indicators of career success (Hall, 2002). Its usefulness and benefits have been emphasized by the researchers who have used it, describing it as one of the most robust and consistent measures of success in different contexts Abele & Spurk, 2009; Heslin, 2005), the most prevalent operationalization of extrinsic career success (Judge, Klinger, & Simon, 2010; Ng, et al, 2005), a relevant indicator of career success in contemporary society (Gelissen & De Graf, 2006) and a crucial measure of individual career success (Zhang & Arvey, 2009).

Regarding the second aim of this study, although we should bear in mind that the direction of the results depends on the type of model and measures used, and despite the fact that the use of the same type of criteria and predictors can lead to more homogeneous results which enable us to make comparisons and generalize the results, there are other factors which contribute to the shaping of the complex relationships between predictors and criteria. The role of *the location of the predictor within the predictor-criteria causal chain* is of particular interest due to its relevance and for having received little attention up until now. In some cases, the predictor is

further away from the criteria while, in other cases, it can be closer. In the first case, the predictor occupies a more distal position, and in the second it occupies a more proximal position. In this causal chain, the effect of the predictor on the criteria can be direct or indirect. The former does so without the mediation of other predictors, while the latter does so through a mediator variable.

The analysis of the effects of *mediator variables* has not been the subject of much discussion until now, given that, for researchers, the assumption of direct effects has prevailed over indirect effects (Groves, 2005), such as in the analysis of the relationships between personality and earnings. Correlations found between personality and earnings and the incremental validity of personality on earnings beyond cognitive ability (Boudreu et al., 2001; Bowles, Gintis, & Osborne, 2001), a connection known as "the big-five salary link", indicate that employees with a particular configuration of personality traits work harder and earn a higher salary (Ferris, Witt, & Hochwarter, 2001; Hülsheger, Specht & Spinath, 2006; Spurk & Abele, 2011). Theoretical approaches such as the incentive-enhancing property of personality traits (Bowles et al., 2001); the trait activation theory (Tett & Burnett, 2003) and others of an interactionist perspective (Judge & Hurst, 2007; Lyubomirsky, King, & Diener, 2005) support the direct relationships between personality and earnings.

However, there are a small number of studies that analyze the influence of *personality on salary mediated by third variables*. These studies include those carried out by Boudreau et al., (2001), which adds human capital and motivational variables as mediators; Zhang & Arvey, (2009), which looks at the mediating effect of an individual's leadership role occupancy; and Spurk & Abele, (2011), which considers occupational self-efficacy and career advancement goals as mediators. Spurk & Abele argue that *personality is a more distal determinant* of career outcomes, mediated by more proximal variables. Based on process-related personality (McCrae & Costa, 1996) and career research (Lent, Brown, & Hackett, 1994), these authors suggest that the influence of personality on career outcomes, and salary in particular, is mediated by serial mediation processes in a multiple mediation model.

This study main aim is to look at the proximal mediator role of emotional intelligence (EI) in the personality-earnings relationship. The idea behind including EI as a potential mediator variable is to explore new relationships, given the difficulty of reaching clear, consistent conclusions regarding its influence on professional success (Amelang and Steinmayer, 2006), Newsome, Day, & Catano, 2000; Rode et al., 2008).

The idea that the effects of personality on salary can be produced through EI is supported by the significant correlations found between personality traits and earnings, as described above; the significant correlations found between personality traits and EI dimensions (e.g. Bastian, Burns, & Nettelbeck, 2005; Gannon & Ranzijn, 2005; Law, Wong, & Song, 2004; Ng et al., 2005; O´Boyle et al, 2011; Van der Zee et al., 2002; Van Rooy & Viswesvaran, 2004) and the relationships between EI dimensions and work outcomes criteria, which have proven their *predictive and incremental* validity over GMA and personality traits (e.g. Burns, Bastian, & Nettelbeck, 2007; Brackett, Rivers, & Salovey, 2011; Côté & Miners, 2006; Iliescu, Ilie, Ispas, & Ion, 2012; Lam & Kirby, 2002; Law, Wong, Huang, & Li, 2008; Lopes, Grewal, Kadis, Gall, & Salovey, 2006; Lyons & Schneider, 2005; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011; Van der Zee, Thijs, & Schakel, 2002; Van Rooy & Viswesvaran, 2004).

Emotional intelligence, conceptualized as one's ability to perceive, identify and manage emotions and which provides the basis for the social and emotional skills that are necessary for success in almost any occupation (Boyatzis, Goleman, & Rhee, 2000; Sala & Dwight, 2002), would therefore act as a predictor and mediator in the personality-earnings relationship.

To evaluate EI, this study has used Perceived Emotional Intelligence (PEI), measured by the TMMS, a self-report measure based on Salovey's four-branch ability model, given the high validity of this measure with regards to the rest of EI measures (see meta-analysis of O'Boyle et al., 2011 and Van Rooy & Visweswaran, 2004). The former demonstrate that self-report or peer-report measures based on the four-branch model of EI have the largest incremental validity beyond cognitive ability and the Five Factor Model (FFM). The use of self-report measures would also enable an increase in the validity of the "cascading model" without using ability measures.

Amongst the different personality traits, we believe that the most relevant indirect effects are those caused by *neuroticism* and *extraversion*. Since H. J. Eysenck (1970) stated that the most adaptable individuals (which are those who score low in neuroticism and highly in extraversion) are happier, different studies have analyzed the influence of the combination of both of these factors in criteria such as job satisfaction (Judge & Hurst, 2007) and success in training (Bertram & Dale, 1982), concluding that the "combination of Emotional Stability and Extraversion – reflecting a "happy" or "buoyant" personality – may be more important to performance than either trait in isolation" (Judge & Erez, 2007).

The research carried out by Lyubomirsky et al. (2005), which looked at whether happiness leads to success, including financial prosperity, concluded that people with a large number of *positive traits* tend to be more financially prosperous. They argued that positive

emotions – and the traits associated with them (e.g., self-efficacy, confidence, optimism, etc.) – "lead people to think, feel, and act in ways that promote both resource building and involvement with approach goals". Therefore, given the influence of this state of emotional activation in a person's development, it has been suggested that the link between these personality traits, which are the foundations of this emotional activation, also known as "positive affect" (Watson, Clark, & Tellegen, 1988), is indirectly produced through their impact on the emotional perception and regulation processes.

This positive affect, stimulated by a combination of extraversion and neuroticism, which has demonstrated its connection with neurological substrates such as Gray's (1982) "behavioral activation system" (BAS), acts as a facilitator of the efforts needed to obtain better results in the individual's job. A high degree of extraversion, combined with a greater desire for stimulation, would lead a person to pay attention to their own emotions as well as those of others and, together with the low levels of anxiety experienced by those who have a low degree of neuroticism, would also lead to a more controlled use of energy, i.e. a more efficient management of their emotions. This, combined with the fact that those who are more stable and have better social skills are seen as more valuable by those responsible for rewarding people's work, would make it easier for them to earn a higher income and achieve greater progression in their professional careers (Bowles et al, 2001; Tett & Burnett, 2003). Emotional stability (low neuroticism) is part of the "core self-evaluation" (CSE) construct, introduced by Judge, Locke, & Durham (1998), which is defined as "the fundamental premises that individuals hold about themselves and their functioning in the world" (Judge, Erez, & Bono, 1998) and represented by four lower order personality traits: *self-esteem, generalized self-efficacy, emotional stability, and locus of control*. Within this dispositional basis, it has been proven that people who stand out in one of these four elements (emotional stability) are more committed to and persistent in the pursuit of their goals and perform more competently in their jobs (Judge & Hurst, 2007).

The connection between these two personality traits and EI has also been noted by authors such as Petrides & Furnham (2001) who, in their "theory of emotional self-efficacy", demonstrate that those who possess a compound personality trait as a result of the combination of certain traits, including low neuroticism and high extraversion, have a greater ability to *perceive and manage* their emotions than those who do not possess such traits, also known as a "happy personality" (Chamorro-Premuzic, Bennet, & Furnham, 2007).

We have found additional support for the connection between *neuroticism* and emotional intelligence in the significant negative relationships found between neuroticism and emotional

intelligence in general (e.g. Law et al, 2004; Newsome et al., 2000; Schulte, Ree, & Carreta, 2003; Van der Zee et al.,; 2002 Van Rooy & Viswesvaran, 2004) and in the more specific relationships found between neuroticism and emotional perception (Law et al., 2004) and between neuroticism and regulation or use of emotions (Bastian et al., 2005; Joseph & Newman, 2010; Law et al, 2004; O'Boyle et al, 2011). A low level of neuroticism, which is a sign of emotional stability, is linked to greater control of emotions (Kluemper et al., 2013).

With regards to *extraversion*, we have found evidence of its link with EI in the significant positive correlations between this trait and EI in general (Newsome et al., 2000; Van der Zee et al., 2002; Van Rooy & Visveswaran, 2004; Warnick & Nettelbeck, 2004) and between this trait and specific dimensions of EI such as perception, understanding and regulation of emotions (Law et al, 2004), with the strongest correlation being the first of these dimensions.

In addition to these two personality traits, and although more distant in terms of the importance of its indirect effects on professional success through EI, we suggest including a third factor: *openness*, given its connection with the EI dimensions of perception, comprehension and repair, as revealed in the work of Law et al., (2004). The proposal, which is based on the consideration that those with greater openness pay more attention to their inner feelings given their greater curiosity and desire for new stimulus and sensations, is to focus the causal connection between this trait and the dimension of emotional attention. The connection between this trait and related emotional dimensions has been noted by authors such as Frederikson (2001) in his "broaden-and-build theory of positive emotions".

On the other hand, we have not found sufficient data to support a proposal of indirect effects that includes the rest of personality traits, such as *constientiousnesss and agreeableness*, which is why we have not incorporated them in our starting model.

Given the above set, we state the following hypothesis on the relationships between personality traits and earnings concerning direct and indirect effects:

Hypothesis 3: Amongst the different personality traits, neuroticism, extraversion and openness have a indirect influence over salary through PEI. Neuroticism is negatively related to the PEI dimensions TMMS attention (a) and TMMS repair (b), extraversion is positively related to TMMS attention (c) and openness is positively related to TMMS attention (d).

Figure 1, below, represents our theoretical model and empirical approach, which incorporates lines of research and relevant theoretical positions on the direct impact of individual differences on salary, "personality-salary link", and the connections between EI and career success indicators and between personality traits and emotions, as discussed above.

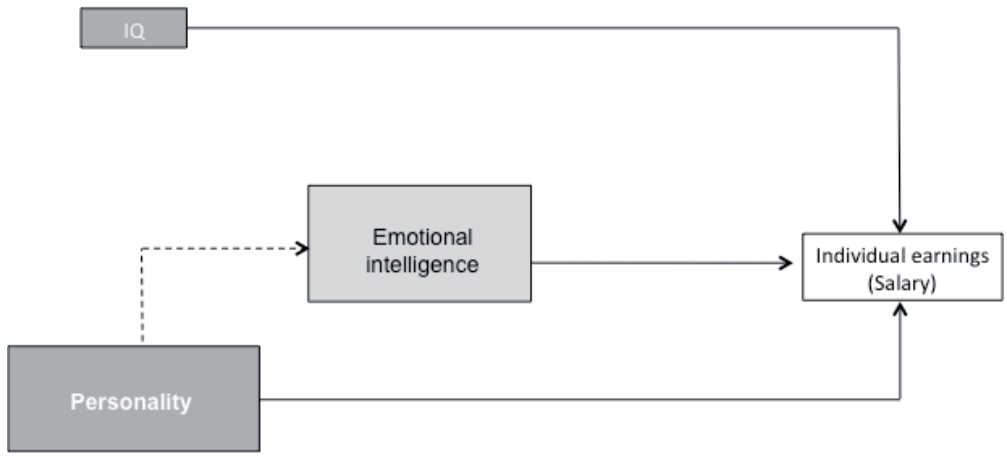

Figure 1. Theoretical process model for influences from IQ and personality to salary.

With regards to the way in which EI mediates between personality traits and earnings, we support the relationships found by Joseph & Newman (2010) amongst EI sub-facets in their model known as "*cascading model*". This model, which is based on the theories of emotion, regulation of emotions and self-regulation (Gross, 2008), states that the three sub-facets in which EI can be divided according to the ability based-model – *emotion perception, emotion understanding and emotions regulations* (the fourth facet, emotional facilitation, was excluded from this model because of its redundancy with the regulation facet) – are causally linked in the process of influence over job performance. The relationship between the three dimensions of EI and job performance is as follows: emotion perception precedes emotional understanding, which in turn precedes emotion regulation. In other words, the ability to understand emotions mediates the relationship between the ability to perceive emotions and the ability to regulate them, with the latter directly affecting job performance. Emotion regulation or emotion management ability (Kluemper et al., 2013) therefore becomes the key dimension of EI in terms of influencing job performance, probably through the induction of affective states (positives) that are beneficial to job performance ("*Frederikson´s broaden-and-build theory, 2001"*) and which enable the creation of intrapersonal, interpersonal and motivational processes that improve task performance (Kluemper et al., 2013; Tsai, Chen & Liu, 2007).

Regarding to the mediating role of IE, we propose the fourth hypothesis:

Hypothesis 4: PEI dimensions mediate the relationship between personality traits (neuroticism, extraversion and openness) and salary through a causal process in the following order: TMMS attention has an influence on TMMS clarity (a), which in turn influences TTMS repair (b), and the latter influences salary (c).

Finally, and with regards to sex as a covariant (Rode et al., 2008; Joseph & Newman, 2010; Amelang & Steinmayr, 2006: Ng et al., 2005), we suggest one last hypothesis:

Hypothesis 5: Gender is related to salary, in a way that men have higher salaries than women.

To summarize, our proposal suggests that a certain configuration of personality traits (low neuroticism and high extraversion and openness) is related to the probability of being more or less emotionally intelligent. Given that being more emotionally intelligent is linked to achieving greater success and earning a higher salary, the dimensions of EI will act as mediators (and, therefore, as proximal variables) in the personality-earnings relationship.

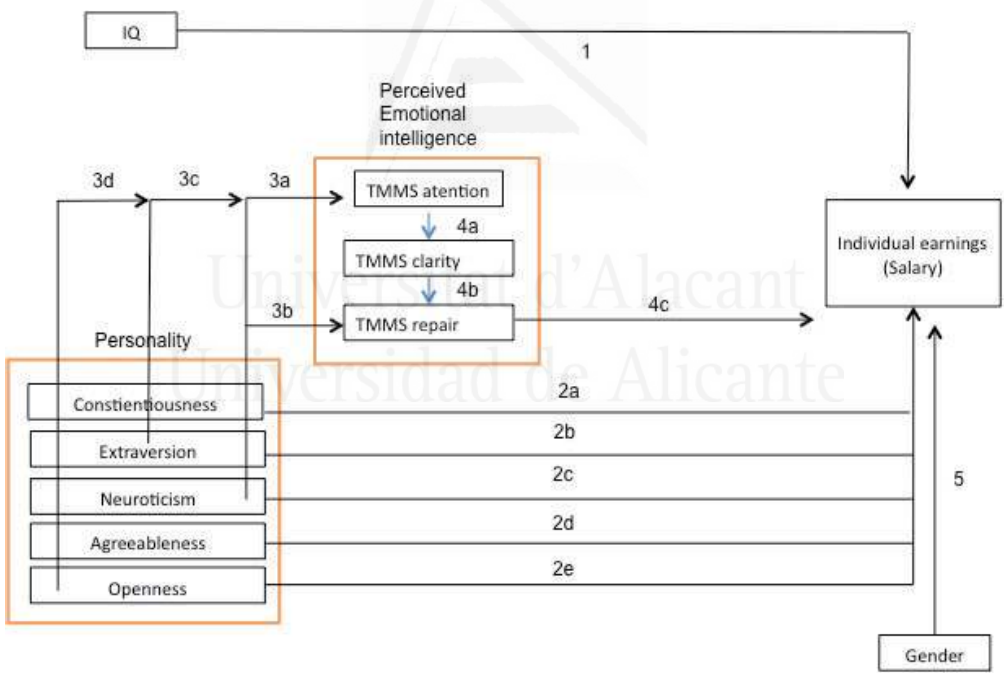

Figure 2. Hypothesis.

This study contributes to career success literature by highlighting the mediating effect of EI in order to capture the direct and indirect effects of personality on earnings. This will lead to an advancement in our knowledge of the connections between the predictors and criteria for

achieving extrinsic success at the early career stage, with important implications for selection, training and development. It also contributes to personality literature, providing support to models such as the model of the Personality Process by McCrae & Costa, (1996). The consideration of explanatory alternatives, such as the indirect relationship suggested in this study, could open a promising line of work in the search for options that will enable to us clarify the current confusing panorama, in the line proposed by Kluemper et al., (2013), who suggests dealing with the specific facets of EI instead of its generic and broad aspects.

In terms of the specific, original and unique contributions of this study, we would like to emphasize that it is the first time that the mediator effect of EI has been analyzed with regards to the criteria for achieving professional success, that it analyses both types of predictors (emotional and cognitive), that the sample is composed of graduates and workers instead of students, that it has compared variables such as educational level or professional experience (criticism of Zhang & Arvey, 2009) and that it uses a longitudinal approach of the sample at the early career stage, which has only been done on a small number of occasions (e.g. Rode et al, 2008). Overall, it considers EI as a mediator variable between personality and salary, and uses its facets (attention, clarity and understanding) as elements that are causally related following the direction established by Joseph & Newman (2010) in their "cascading model". However, it differentiates itself from the later in that it does not use a meta-analytical approach nor does it include job performance as a criterion. Instead, it uses salary (earnings) as the criterion and emphasizes the key role (key connector) of emotional regulation (TMMS repair) in the connection between the predictors and the criterion.

Method

Participants

The sample consisted of graduates who claimed that they were employed, selected from a survey taken by 339 university graduates from the University of Alicante (Spain) three years after having completed their studies. Three years earlier, these 339 students had participated in a study that assessed their personal and socio-emotional competences during their final year of university. They had been selected through stratified random sampling, proportional to the number of students enrolled in each of the fields: science and technology (25.7%), social sciences (18.9%), education (24.5%), bio-health (15.9%) and humanities (6.5%). All of the participants were asked to sign a consent form indicating their willingness to take part in this research study. Among those 339 students, 130 university graduates in employment, were

selected, of which 68% were women and 32% were men, with a mean age of 26.4 years (SD 4.38).

Measures

Test of "g", scale 3, by R. B. Cattell & A. K. S. Cattell

To measure general mental ability, we used the test of "g", Scale 3, developed by R.B. Cattell and A.K.S. Cattell (adapted to Spanish by *Técnicos Especialistas Asociados*, 1994). This collectively applied scale consists of four subtests: series, classification, matrixes and conditions, which require cognitive operations such as identification, perceived similarities, seriation, classification, matrixes and comparisons. This enabled us to obtain the IQ of the sample. The "g" factor loadings are high (around 0.90).

Big five inventory (NEO-FFI, Costa & McCrae, 1992)

This is a self-report measure with five personality dimensions: Extraversion, Agreeableness, Consciousness, Neuroticism and Openness. The short version consists of 60 elements. Participants indicate their level of agreement with each item on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The reliability of the Spanish version ranges between 0.82 for agreeableness and 0.90 for neuroticism, similar to the English version.

Trait meta-mood scale-24 (TMMS-24, Fernández-Berrocal, Extremera, & Ramos, 2004)

The Spanish short version (24 items) of the Trait Meta-Mood Scale-48 by Salovey et al. (1995) measures three factors: (a) attention to feelings, (b) clarity of feelings (defined as understanding one's feelings), and (c) mood repair, defined as attempts to maintain pleasant moods or repair unpleasant ones. Participants indicate their level of agreement with each statement on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The scale's internal consistency and test-retest reliability is satisfactory and its reliability increases for each of its factors: attention (0.90), clarity (0.90) and repair (0.86).

Career success criteria

To assess the extrinsic indicators of career success – defined as objective and observable and consisting of achieving very visible outcomes such as a higher salary or promotion (Judge et al., 1999), and which has been considered a strong, consistent measure of success in various contexts (Heslin, 2005; Nicholson & de Waal-Andrews, 2005) – we used the items corresponding to salary from a specific questionnaire based on the workforce entry

questionnaires developed as part of the CHEERS (Schomburg & Teichler, 2006) and REFLEX (2007) studies, which collected detailed information on aspects such as the degree course studied, transition from education to employment, first job following graduation, employment history, current position and the competences considered essential for entry into the labor market. The questionnaire consisted of 43 questions organized into seven sections covering various aspects relating to education, transition to employment, competences and satisfaction, among others.

Salary level was measured as gross monthly income and was divided into seven categories: less than 600 Euros (1), between 600 and 1000 Euros (2), between 1000 and 1200 Euros (3), between 1200 and 1500 Euros (4), between 1500 and 1800 Euros (5), between 1800 and 2000 Euros (6) and more than 2000 Euros (7).

Procedure

The first phase was carried out when the students were in their final year of university. The NEO-FFI questionnaire was distributed to a sample of students, along with the test of factor "g" and the Trait Meta-Mood Scale-24. In 2012, three years after the first study was conducted in November 2008, the initial sample was reduced to 339 graduates and comprised those who were willing to continue taking part in the study after graduation by completing a questionnaire designed to collect information about their employment status and their entry into the workforce. The questionnaire, which took no more than 30 minutes to fill in, was distributed online and had to be completed within three months.

Moreover, given the importance of understanding the relationships between different predictors of career success, we have used a *path analysis approach* to determine the empirical relationships among these constructs. The aim of this model is to analyze the direct and indirect relationships between the predictors we have studied and the criteria in order to establish the relative importance of these predictors in determining success in the early career stage. To the best of our knowledge, this aspect has not been analyzed in this way until now.

Results

A path model was tested between the variables GMA, measured as IQ, Personality Traits, Emotional Intelligence and Salary in order to determine the relationships among these variables. To estimate the path coefficient, we used the maximum likelihood method, assuming normal multivariate distributions since the skewness and kurtosis values for the variables ranged between ± 1, with the exception of the variables IQ (kurtosis = 3.02; skewness = -2.81) and

agreeableness (skewness = -2.79). Although the kurtosis multivariate was 9.76 (critical ratio = 2.91), a slightly higher than desirable value, it was well below the maximum allowed value of p*(p+2), where p is the number of variables (Bollen, 1989), in this case 11*13 = 143.

See Table 1 for the matrix of correlations and descriptors.

Table 1. *Correlation Matrix of all Measures and Descriptive Statistics (N=130)*

	M	SD	1	2	3	4	5	6	7	8	9	10
1. IQ	102.4	15.5	1									
2. Neuroticism	31.9	8.3	-.23*	1								
3. Extraversion	45.6	6.7	.29**	-31**	1							
4. Openness	43.22	7.0	-.01	-.05	.22*	1						
5. Agreeableness	41.45	6.9	-.08	-.18	.21*	.35**	1					
6. Conscientiousness	46.2	6.3	.01	-.26**	.23*	.23*	.30**	1				
7. TMMS attention	26.34	5.63	.09	.27**	.16	.20*	.13	.10	1			
8. TMMS clarity	26.47	5.74	.07	-.45**	.42**	.19	.21*	.35**	.26**	1		
9. TMMS repair	28.53	6.08	.14	-.47**	.33**	.38*	.21*	.33**	.14	.52**	1	
10. Salary.	1372	536	.01	-.24*	.06	-.17	-.00	.12	.01	-.09	.26*	1

*p < .05, **p<.01.

The maximum likelihood method, used in AMOS 7, is robust for departures from normality, especially if the skewness and kurtosis values are not extreme, i.e. skewness values I2I and kurtosis I7I (West, Finch & Curran, 1995). The bootstrap approach implemented in AMOS 7 was used to estimate the parameters.

The initial theoretical model (model 1) was not a good fit with the data. As a first step (model 2), all of the non-significant relationships were removed from the model. Then, in response to the changes suggested by the AMOS modification indices and to the theoretical sense of these changes, we included three relationships – NEUROTICISM – CLARITY (model 3), EXTRAVERSION – CLARITY (model 4), and OPENNESS - REPAIR – in order to obtain a final model (model 5) which was a good fit with the data.

As shown in Table 2, the fit indices for the initial model were far from the desired values (Hu & Bentler, 1999), whereas the indices from the final model indicated a very good fit with the data.

Table 2 *Fit Indices of the Models*

Model	c^2	*df*	*p*	c^2/df	CFI	RMSEA	PCLOSE
Model 1	151.530	41	.000	3.70	.427	.162	.000
Model 2	78.160	13	.000	6.01	.560	.221	.000
Model 3	42.772	12	.000	3.56	.792	.158	.000
Model 4	35.896	11	.000	3.23	.832	.148	.002
Model 5	18.629	10	.045	1.86	.942	.092	.136

Figure 3 represents the path model with regards to the postulated hypotheses, showing only significant paths (p<.05).

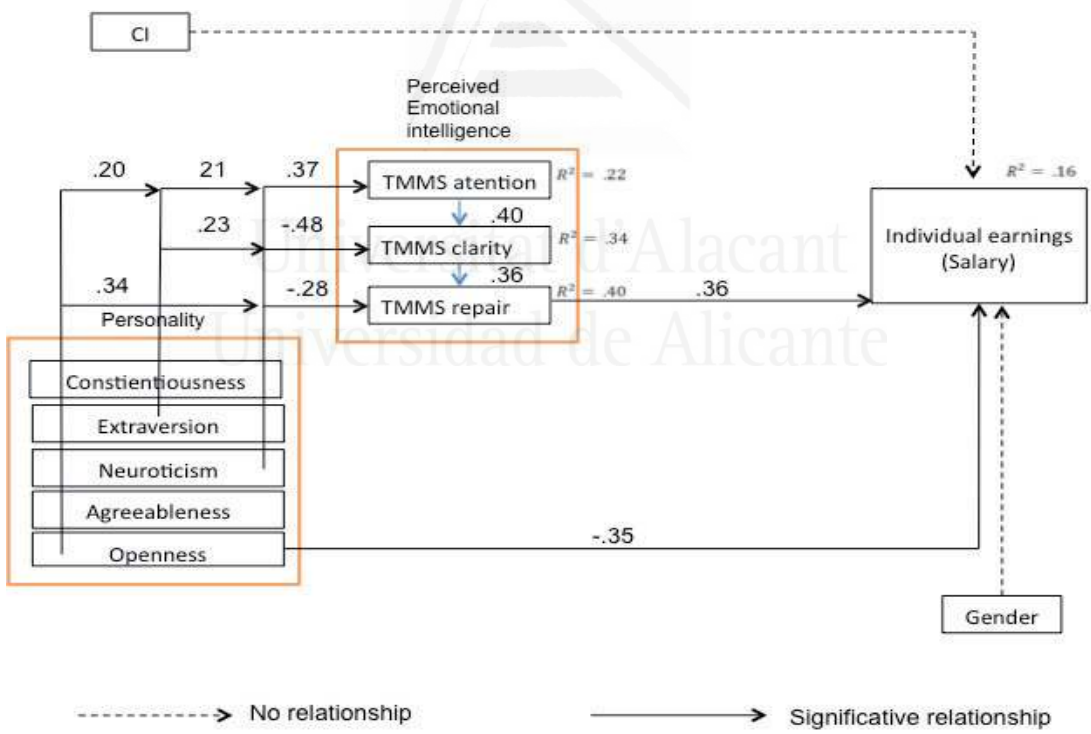

Figure 3. Path diagram of the mediating effects of EI.

As can be seen in Figure 3, in general 16% of the variance in career success (salary) was explained by the predictors.

The best salary predictor was TMMS repair (β=.36; p=.002), followed by Openness (β = -.35; p = .001).

The largest indirect effects of predictors on salary were neuroticism (β = -.14; p = .003), openness (β = .13; p = .005), and clarity (β = .13; p = .006).

Table 3 shows the overall values of the standardized direct, indirect and overall effects. It is important to note that 11 direct path coefficients were statistically significant.

Table 3. *Statistically Significant Standarised Direct, Indirect and Total Effects*

Variables	Effects	1	2	3	4	5	6
TMMSATENTION	Direct	.215*	.196**	.367**	-	-	-
	Indirect	-	-	-	-	-	-
	Total	.215*	.196*	.367**	-	-	-
TMMSCLARITY	Direct	.230*	-	-.480**	.402**	-	-
	Indirect	.087*	.079*	.147**	-	-	-
	Total	.317**	.079*	-.332**	.402**	-	-
TMMSREPAIR	Direct	-	.340**	-.276*	-	.357**	-
	Indirect	.113**	.028*	-.118**	.143**	-	-
	Total	.113**	.368*	-.395**	.143**	.356**	-
SALARY	Direct	-	-.351**	-	-	-	.361*
	Indirect	.041**	.133**	-.142**	.052**	.129**	-
	Total	.041**	-.218*	-.142**	.052**	.129**	.361*

Note. 1= Extraversion; 2= Openness; 3= Neuroticism; 4= TMMSAtention; 5= TMMSClarity; 6= TMMSRepair

*p < .05, **p<.01.

Direct relationships were also found between personality traits and the perceived emotional intelligence variables. Thus, neuroticism influenced TMMS attention (β = .37; p = .001), TMMS clarity (β = -.48; p = .001), and TMMS repair (β = -.27; p = .003); openness influenced TMMS attention (β = .20; p = .025), and TMMS repair (β = .34; p = .001); and extraversion influenced TMMS attention (β = .21; p = .016) and TMMS clarity (β = .23; p = .010).

Lastly, the results did not show statistically significant direct relationships between personality traits. IQ is not linked, direct or indirectly, to the criteria nor with any of the dimensions of emotional intelligence.

Discussion

This study has explored the direct influence of three kinds of predictors (GMA, personality traits and EI) and the role of EI as a mediator in the influence of personality traits over early career success. The study's overall results show that initial salary was *directly* predicted by the EI dimension "TMMS repair" (positively) and the personality trait "openness" (negatively), and *indirectly* predicted by neuroticism (both positively and negatively), extraversion (positively) and openness (positively) via EI dimensions. In addition, it also demonstrated that the indirect effects of personality traits are higher than the direct effects. Indirect effects are produced through the EI dimensions, which are connected to each other and the criteria following the causal chain: *perception, understanding and emotional regulation*, according to the model suggested by Joseph and Newman (2010).

With regards to *direct influences*, the results for "*TMMS repair"* support hypothesis 4c and reinforce the importance of emotional self-regulation in different contexts. Our findings are in line with other studies which suggest that the ability to manage emotions and control our mood is one of the strongest relative predictors of job performance (Fisher & Ashkanasy, 2000; Kluemper et al., 2013). Those who show a greater capacity to overcome negative events, have a mostly optimistic outlook and try to think about pleasant things, to think positively or to maintain a good mood, will achieve higher levels of individual earnings in the early stage of their career.

The importance of this dimension (also known as *emotion management ability*) as a strong predictor of task performance has been highlighted by studies which support its incremental validity (Gannon & Ranzijn, 2005; Kluemper et. al., 2013). This serves as support to those research proposals which are more focused on analyzing the specific dimensions of EI than on assessing the impact of general EI measures, which seem to have provided unclear results (Rode et al., 2008).

Its relevance has also been proven by studies which have used the same measure of emotional intelligence (TMMS) as a predictor, obtaining significant relationships between this predictor and other success criteria such as job performance (Law et al., 2004), entrepreneurial self-efficacy (Salvador, 2008) and life satisfaction (Extremera & Berrocal, 2005). Furthermore, the assessment of the emotional self-regulation dimension carried out through ability measures of emotional intelligence, such as the MSCEIT (Lopes, Brackett, Nezlek, Schutz, Sellin, & Salovey, 2004; Lopes et al., 2006), has also shown links between this dimension, salary and job level achieved within the organization.

On the other hand, direct influence results found for the personality trait *openness,* which supports hypothesis 2e, serves to tip the balance towards those studies which report a negative

relationship between this factor and career and training success criteria (Barrick & Mount, 1991; Bozionelos, 2004; Gelissen & De Graff, 2006; Seibert & Kraimer, 2001). The need to be more focused in the early career stage seems crucial for achieving success and, therefore, an excessive lack of concentration due to a surfeit of different interests would be counterproductive. These findings are consistent with most of the studies cited in the introduction, indicating that the interference of concerns about meeting employment goals can have a negative impact on career success as measured by salary.

With regards to the other personality traits, and in contrast to the studies cited in the introduction and others (Lounsbury, Loveland, Sundstrom, Gibson, Drost, & Hamrick, 2003; Staw & Cohen-Charash, 2004), we found no evidence of direct relationships between these factors and career success criteria. The most surprising result was the lack of a direct relationship between conscientiousness and the criteria. This could be explained by the fact that the participants had not been working for very long – more time (i.e. more experience) may be needed in order for tenacity to influence outcomes. The lack of direct relationships between the rest of personality traits (extraversion, neuroticism and agreeableness) and the criteria could be explained by the type of criteria used (extrinsic), the professional moment of the participants' careers (early career stage) or because these effects are produced indirectly, as this study demonstrates.

On the other hand, the negligible direct contribution of general intelligence as a predictor of the criteria may be due to a) the type of sample studied (graduates who it would be reasonable to assume have a high IQ), b) the interaction between IQ and emotional intelligence, in such a way that the correlation between variables and criteria varied depending on the IQ level (Coté & Miners, 2006), or c) the type of criteria on which the prediction equations were based (job performance compared to extrinsic or intrinsic career success).

In addition, gender does not show any links to salary, meaning that there are no salary differences with regards to sex, which does not support hypothesis 5.

To summarize, direct influences suggest that a lower degree of openness and greater mood repair lead to higher salaries. This supports 2 of the 8 hypotheses which suggest direct effects, and thereby does not confirm hypotheses *2a, 2b, 2c or 2d.*

With regards to the mediator effect of emotional intelligence and its dimensions, demonstrated by the *indirect influences* between personality traits and the criteria, the results prove that TMMS attention mediates the effect of *neuroticism* (hypothesis 3a), *extraversion* (hypothesis 3c) and *openness* (hypothesis 3d) over salary; TMMS clarity mediates the effect of neuroticism and extraversion (neither hypothesis was suggested) and TMMS attention (hypothesis 4a) over salary; and TMMS repair mediates the effect of neuroticism (hypothesis 3b),

openness (hypothesis not suggested) and TMMS clarity (hypothesis 4b) over salary. Thus, the results confirmed 5 out of 6 of the suggested hypotheses on indirect effects and found 3 indirect relationships that had not been foreseen.

With regards to the predictors that demonstrated indirect effects, *neuroticism* was the only personality trait with effects on the three EI dimensions: TMMS attention and TMMS repair, included as hypotheses 3a and 3b, and TMMS clarity, which had not been foreseen in the hypotheses. The results, however, show that the relationship between neuroticism and TMMS attention is positive, contrary to what was suggested in hypothesis 3a. Thus, a higher degree of neuroticism (i.e. less emotional stability) does not just seem to affect the capacity to pay attention to emotions, but also the strength. This is against what has been suggested by authors such as Law et al. (2004), but in agreement with studies that indicate positive relationships between neuroticism and attention to feelings (Extremera & Berrocal, 2005).

In order to give a more precise explanation of these apparently contradictory results, it is important to take into account the potential impact of situational factors. The situation's pressure level, for example, could act as a moderator of the individuals' anxiety level whereby, if the situation is not very stressful, the individual's high anxiety level does not affect the process of paying attention to emotions as much as if the stress level were high, according to the Yerkes and Dodson law. The less cognitive character of this dimension (unlike emotional clarity, for example) and its more or less automatic and less conscious activation (see significant negative relationship with conscientiousness and the study conducted by Fiori (2009), which presents EI as a dual process) would make it less sensitive to the influence of anxiety.

The negative relationships found between neuroticism and TMMS clarity (not foreseen in the hypotheses) and between neuroticism and TMMS repair (hypothesis 3b) are similar to the relationships found in other studies (such as Ciarrochi, Chan, & Caputi., 2000; Extremera & Berrocal, 2005; Freudenthaler & Neubauer, 2005; García-Izquierdo, García-Izquierdo, & Ramos-Villagrasa, 2007; Schulte et al., 2004; Van der Zee et al., 2002; Van Rooy & Viwesvaran, 2004; Warnick & Nettelbeck, 2004), which state that a low level of emotional stability makes the capacity to learn and regulate emotions more difficult. This implies that a lower level of neuroticism will lead to greater emotional clarity, more emotional self-regulation and a higher salary.

Although it had no direct impact on any of the success criteria, *extraversion* indirectly affects salary through a positive relationship with TMMS attention (initiating the process of activation of emotional clarity and regulation in the cascade), which supports hypothesis 3c, and with TMMS clarity (hypothesis not foreseen). According to Frederikson's broaden and build

theory (2001), the first relationship (extraversion and TMMS attention) suggests that extroverts have broader behavioral repertoires, improved behavioral flexibility and a higher attention span. Their better performance in tasks that require divided attention, greater breadth and speed, would reflect a similar behavioral pattern to that mentioned above for the case of neuroticism, supported by the differentiation between the types of quick thinking (more associated with extraversion) and slow thinking suggested by Kahneman (2011). In the second relationship, which was not foreseen in the suggested hypotheses, the influence of extraversion over clarity of feelings is in line with the findings of authors such as Van der Zee et al. (2002), Van Rooy & Viswesvaran (2004) or Warwick & Nettelbeck (2004), which highlights the importance of sociability and positivism associated with this factor in the processes of emotional learning and understanding. In order to understand these results, it may be useful to resort to the differentiation established by Hogan (1986) between two subcategories of this factor: sociability and ambition, whereby some extroverted individuals stand out more in the search for relationships whilst others stand out more in terms of ambition, dominance and self-confidence. Having a greater understanding of their emotions could be more relevant for the latter than for the former.

The third personality trait with a indirect influence over salary via emotional intelligence is *Openness*. Its positive relationship with TMMS attention, which confirms hypothesis 3d, supports the suggestion that connects curiosity and desire for new stimulus and sensations with attention to internal feelings. The positive and significant relationship found in this study, and not foreseen with TMMS repair, is consistent with the findings of Van Rooy & Viswesvaran (2004), demonstrating that aspects associated with greater openness, such as enthusiasm, positivism and flexibility, enable greater emotional self-regulation and a higher salary. The diversity of the elements which make up this factor, whose significance is still not sufficiently clear, or the fact that the dimensions of emotional intelligence can act as a moderating filter, not just as a mediator, could explain the opposite direction of the direct (negative) and indirect (positive) influence of openness over the criteria.

Lastly, the results illustrate the causal connection considered in the suggested hypotheses (4a, 4b and 4c): perception and attention to emotions precede understanding and interpretation of emotions, which in turn influences emotional regulation prior to its impact on the extrinsic success criteria. This key variable plays a mediator role in the final stage of enhancing job performance through emotional competence. Thus, it is important to determine the role and criteria of each of the three EI dimensions in the mediation process. The fact that any of these dimensions can act as an entrance channel for a predictor variable, that at least one has to enter via TMMS attention to initiate the process, and that it is only the TMMS repair dimension which is

directly connected with the criteria, becoming the final link and the exit channel of the effects of the predictors over the criteria, apart from the fact that they are causally linked, as can be seen in the results, serve to validate the model on which we have based this part of the study (Joseph & Newman's "cascading model", 2010). The interpretation and significance of this evidence highlights that, without an adequate perception and understanding of emotions, it is not possible to have the adequate behaviors to regulate them, which supports the conceptualization of EI dimensions as being linked and belonging to a construct.

To summarize, the results prove the importance of the mediating effect of EI in the influence of personality traits over extrinsic success criteria (salary) at the early career stage. Neuroticism, extraversion and openness are a combination which, similar to the concept of "positive personality" (Lyubomirsky et al., 2005), has a greater indirect than direct influence given that they intervene by initiating a process of emotional activation in cascade which leads individuals to think, feel and act in a way that enables them to build resources and get involved in attaining goals which allows them to achieve success. As stated by Tett & Burnett (2003) in their **"**trait activation theory", certain personality traits, such as those included in this study, can be activated in situations that provide opportunities for them to be reinforced. The demands experienced in the early career stage, which are possibly different to those experienced later on in a person's professional career, can act as activators of these traits. As discussed above, these traits act through dimensions of emotional intelligence in a process of causal connection in cascade, which is materialized through the impact of emotional regulation as an exit channel towards a behavior that could lead the individuals to work hard, to be recognized by employers and to earn higher salaries. Positive moods and task performance are related. In this relationship, the withdrawal of negative emotions which retain the cognitive resources that are necessary for job performance could explain the positive effect of EI (Tsai et al., 2007).

On the other hand – and in contrast with other authors who have found no relationship between personality traits and EI (Byrne, Dominick, Smither, & Reilly, 2007), who have found differences between them (Davies, Stankov, & Roberts, 1998; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995), or who have found relationships but have not considered them to be large enough to conclude that they were equivalent factors (Extremera & Fdez-Berrocal, 2005; Law et al., 2004) – our findings provide an alternative point of view within the debate about the uniqueness and validity of EI as a construct (Barchard, 2003; Locke, 2005; Petrides & Furnham, 2000; Zeidner, Mathew, & Roberts, 2003). This new approach provides arguments that justify the role of EI as a key mediator variable of the impact of personality traits over professional success, differentiating both predictors in terms of their location in space according to their distance in the

causal process over the dependant variable. This study has, for the first time, highlighted the unique character of its contribution, the greater distality of personality with regards to EI, and its performance both directly and indirectly, using EI for the latter type of influence.

Another important strength of this study is that it is based on longitudinal data from the same sample of graduates. These individuals, who were all in employment at the time of conducting this study, were monitored from their final year at university until three years after completing their studies. This enables us to make causal inferences to a great extent. Understanding their practical implications, in terms of serving as the basis for the assessment and development of socio-emotional competences and certain personality traits, could substantially contribute to this area of research given that they are the most influential variables in this career success criteria.

However, it is important to consider the strengths and limitations when evaluating the results. One of the limitations of the study is the specification of the model. Despite the fact that this study does not test a comprehensive model of the variables linked to career success, but rather a model that analyzes the influence of the dimensions of EI in predicting career success, the model may contain a specification error (which would affect the results) if relevant variables are omitted. Another limitation is related to the sample size. This study may lack sufficient strength to corroborate the statistical significance of the relationships that would have been found if a larger sample had been used. A third limitation, also derived from the sample size, could be the difficulty in disaggregating the subsamples by qualification in order to ascertain the possible differential behavior of the variables studied in different qualifications.

For future studies, we suggest using a measure of emotional intelligence based on the ability model and the inclusion of other types of potential mediator variables, such as motivation, in order to contrast them in the process of overall influence and the control of situational aspects such as job characteristics (e.g. high and low emotional jobs).

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