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The Reading the Mind in the Eyes Test: A Portuguese version of the adults' test

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The Reading the Mind in the Eyes Test (RMET) is a Theory of Mind task that assesses the ability to understand others' mental states in both healthy and clinical populations. The goal of the present study was to translate the revised version of the adults' RMET to the Portuguese (European) language, investigate item validity for this version and differences related to gender. The English revised version was translated into Portuguese and 5 pilot studies were run to reach a final Portuguese version of the test. After these procedures, 130 adult participants (71 females) answered a computer version of the RMET. Thirty items showed appropriate answer distribution, while the remaining six did not meet the initially stipulated criteria for item validity. Mean scores for this adaptation were similar to those found in the original revised version and other translations. We found no differences related to gender in our sample. Future investigations should explore additional validity and reliability measures of this instrument.

Key words: RMET, Theory of mind, Social cognition.

One of the concerns in the field of Social Cognition research over the past few decades has been the development of instruments able to quantify subtle differences in the abilities of attributing emotional and cognitive states to others, a key component of "Theory of Mind" (ToM), which is generally described as the ability to attribute independent mental states (desires, intentions, beliefs and emotions) to oneself and others, for the purpose of explaining and predicting others' behavior (Baron-Cohen, Leslie, & Frith, 1985; Baron-Cohen, Wheelwright, Hill, Raste, & Plumb, 2001; Kalbe et al., 2010; Paal & Bereczkei, 2007; Premack & Woodruff, 1978).

Perceiving others' internal states through nonverbal language, such as facial expressions and voice tone, is crucial to the development of positive social interactions (de Haan & Matheson, 2009). For this reason, researchers try to understand how differences in this ability are related to difficulties in social interactions (Adolphs, 2003; Astington & Jenkins, 1995), and to clinical conditions characterized by deficits in social skills, such as autism (Frith, 2001; Phillips, Baron-Cohen, & Rutter, 1998) and schizophrenia (de Achával et al., 2010; Sprong, Schothorst, Vos, Hox, & van Engeland, 2007).

With this in mind, Baron-Cohen, Jolliffe, Mortimore and Robertson (1997) developed the Reading the Mind in the Eyes Test (RMET) as a task aimed to discriminate between individuals with healthy ToM skills and individuals with clinical conditions where this ability is impaired, such as autistic spectrum disorders (Frith, Morton, & Leslie, 1991). The RMET is a facial perception task similar to previous ones (e.g., Ekman & Friesen, 1976; Kerr & Neale, 1993), where

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participants were asked to associate an emotional state to a picture of a face. The RMET, however, has some distinguishing features. Firstly, it purposefully uses photographs from the eye-region only, thus limiting the available visual information that can be used. This procedure extends on previous work that showed the importance of eye-gaze alone on the communication of others' intentions and desires (Baron-Cohen, Campbell, Karmiloff-Smith, Grant, & Walker, 1995). Secondly, the terms used in the RMET "(…) are not just emotion terms, but include terms describing cognitive mental states. This is therefore more than just an emotion perception test" (Baron-Cohen et al., 1997, p. 820).

In 2001, Baron-Cohen and colleagues created a revised version of the original RMET. The purpose of this revised version was to widen the range of total test scores, thereby avoiding ceiling effects from healthy individuals. More mental state options were added for each item (from two to four options) and the number of items was also increased (from 25 to 36). Both changes improved the test's power to detect individual differences beyond those already observed between clinical and non-clinical populations (Baron-Cohen et al., 2001). Therefore, the revised version of the RMET is comprised of 36 photographs from the eye-region of distinct individuals, to which participants are asked to attribute one of four possible mental state terms presented for each photograph. A higher score on this task indicates a better ability to understand others' mental states through eye-region expressions. Score differences are notorious among individuals from healthy populations, but especially when comparing with clinical samples of autism and schizophrenia patients, where scores on this task are remarkably lower (Baron-Cohen et al., 2001; Hirao et al., 2008; Murphy, 2006). Henceforth, this is the version of the test that will be discussed.

There are, of course, different types of tasks that have been created to measure the ability to infer internal states and its impairments. Some of these tasks are based on non-verbal behavior such as facial expressions (Hall et al., 2004; Matsumoto et al., 2000) and voice tone (Kerr & Neale, 1993; Rutherford, Baron-Cohen, & Wheelwright, 2002), with some tasks even combining both features (Bellack, Blanchard, & Mueser, 1996; Corrigan & Green, 1993; Golan, Baron-Cohen, & Hill, 2006). Others are mainly verbal (Corcoran, Mercer, & Frith, 1995; Happé, 1994) and others are based on cartoons (Brüne, 2005; Happé, Brownell, & Winner, 1999; Langdon et al., 1997; Sarfati, Hardy-Baylé, Besche, & Widlöcher, 1997; Shamay-Tsoory et al., 2007). These different types of tasks are used to measure different aspects of ToM, with non-verbal tasks focusing more on emotional state decoding, while verbal and cartoon tasks rely more heavily on context and beliefs, desires and intention decoding.

Despite this variety of tests, the RMET remains a relevant task to study social cognition, given its power to detect individual differences in social intelligence abilities in healthy adults (while only utilizing subtle cues like eye expression), its practicality and its easiness to use and score (Baron-Cohen et al., 2001; Bodden et al., 2010; Kirkland, Peterson, Baker, Miller, & Pulos, 2013). Moreover, the variety of studies in which it has already been utilized, both with clinical and healthy populations (e.g., Domes, Heinrichs, Michel, Berger, & Herpertz, 2007; Lee, Harkness, Sabbagh, & Jacobson, 2005; Richell et al., 2003; Uzefovsky, Shalev, Israel, Knafo, & Ebstein, 2012; Voracek & Dressler, 2006), provides a considerable body of work to compare data with.

The RMET has already been translated to various languages, namely Turkish (Yıldırım et al., 2011), German (Pfaltz et al., 2013), Italian (Vellante et al., 2013), Spanish (Fernández-Abascal, Cabello, Fernández-Berrocal, & Baron-Cohen, 2013), Brazilian Portuguese (Sanvicente-Vieira et al., 2014), French (Prevost et al., 2014) and Persian (Khorashad et al., 2015). These translations not only provide relevant information about the psychometric properties of this task, but they also allow for a more straightforward comparison of results across cultures. For instance, Prevost and colleagues (2014), on their validation study, applied the revised English version and the French translation to different samples to compare test scores. They found no differences on the mean scores between them, which provides evidence of the test's suitability to different languages.

The test's construct validity has been assessed, both in the revised version and other translated versions of the test. In the English version the RMET showed significant positive correlations with the Empathy Quotient (EQ) (Cook & Saucier, 2010; Lawrence, Shaw, Baker, Baron-Cohen, & David, 2004), and in the German translation with the Facially Expressed Emotion Labeling (FEEL) (Pfaltz et al., 2013). Significant negative correlations were also shown with the Autism Spectrum Quotient (Baron-Cohen et al., 2001) in the revised English version, and the 20 item Toronto Alexithymia Scale (TAS-20) (Vellante et al., 2013) in the Italian translation, as would be expected, although only with the male group of participants. It is also worth noting, however, that in the Italian translation the RMET and EQ showed no correlation (Vellante et al., 2013).

Test-retest reliability has also been addressed on several studies, in which the RMET was presented to participants twice over periods such as one week (ICC: r=.70, 95% CI [.46; .84]; Prevost et al., 2014), two weeks (ICC: r=.65, 95% CI [.49; .77]; Yıldırım et al., 2011), three weeks (r=.68, p<.001; Pfaltz et al., 2013), one month (ICC: r=.83, 95% CI [.75; .90]; Vellante et al., 2013) and one year (ICC: r=.63, p<.01; Fernández-Abascal et al., 2013; ICC: r=.74, 95% CI [.51; .86]; Khorashad et al., 2015). These studies provide evidence that RMET scores remain stable even after longer periods of time, thus confirming the RMET as a reliable tool for research.

The main goal of the present study was to obtain a Portuguese version of the Reading the Mind in the Eyes Test suited to future research within the Portuguese population[1]. More specifically, we aimed to:

(a) translate the revised 36-item version of the RMET to the Portuguese (European) language, following recommendations to test adaptations by Behling and Law (2000);

(b) run pilot studies to test the suitability of the translated items, to produce a final Portuguese version;

(c) apply the final Portuguese version to a broader sample of non-clinical participants to test items validity, using the criteria proposed by Baron-Cohen and colleagues (2001) in the revised version, and

(d) given that RMET score differences related to gender have been described in the literature, favoring women over men (e.g., Baron-Cohen et al., 1997, 2001; for an extensive review and meta-analysis on the subject see Kirkland and colleagues, 2013), we wanted to investigate whether this translated version has similar results to those reported in other languages.

Method

Preparation of the Portuguese RMET

The adult 36-item revised version of the RMET (Baron-Cohen et al., 2001) was used to generate this Portuguese version of the test. All of the photographs used in the original revised version were maintained for this current adaptation, and presented in the same order. Mental state terms were translated from English to Portuguese (European)[2].

Following recommendations and guidelines purposed by Behling and Law (2000) for test adaptations, the target and foil mental state terms used in each item of the Portuguese RMET were

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[1] To our knowledge, there are two versions of the RMET translated to Portuguese (European) available online (on the Autism Research Centre website); however, there is no report of the validation procedures on any of these. Sousa (2012) also reported using a version previously validated on a master thesis, but we were unable to find any information regarding its psychometric properties. None of these versions were used during our translation procedures.

[2] We did not use the Brazilian Portuguese version as a starting point because our translation procedures were already finished when that version was published.

translated by a Portuguese native speaker. Items were then back translated by an English native speaker residing in Portugal. Mismatching terms were resolved by consensus between the authors, and a final version of the Portuguese terms was accepted.

Pilot studies

In order to obtain a final version of the test, five pilot studies were conducted to test the validity of the translated items. Each pilot study was run with eight participants (four female), recruited amongst the population of the University, mostly with backgrounds in Biology and Psychology. Following Baron-Cohen and colleagues' (2001) procedure for the revised version of the RMET, we used a "general consensus" criterion. Accordingly, at least five out of the eight judges in each pilot study had to choose the target mental state for each item, and no more than two should select the same foil. When these frequencies were not met for each item, mental state terms were changed and tested again.

Not all of the items were successfully validated after the fifth pilot study; items 01 and 23 did not meet these validity standards in any of the pilot studies, and items 07, 17 and 19 did not show consistent results for each trial run. All the remaining items reached the intended levels of accuracy, and a definitive 36-item version of the Portuguese RMET was presented to a broader sample of participants.

Study participants

One hundred and thirty Portuguese adults (59 male, 71 female), with ages between 18 and 55 years (M=23.62; SD=5.92) participated in this study. Men's ages ranged from 18 to 55 (M=26.24; SD=6.73). Women's ages ranged from 19 to 41 (M=21.44; SD=4.07). All have completed secondary school and are, or have been, pursuing academic degrees in a diverse range of areas (e.g., Biological Sciences and Psychology). All participants were volunteers and gave written informed consent for their participation in the study.

Measures

The RMET consists of a set of 36 photographs showing the eye-region of male and female individuals, taken from movies and magazines. For each item, test participants have to choose one of four possible mental state terms to identify what they perceive the person in the picture is thinking or feeling. Each item answered correctly scores one point, for a total of 36 possible points, with higher scores pointing out a better ability to infer mental states from others' eye-region expressions. In the present study, a computer version (programmed in E-Prime 2.0, Psychology Software Tools) was used.

Procedure

To apply the final version to a broader sample, participants came to the laboratory at the University and answered a computer version of the RMET as part of a larger battery of social network questionnaires and general intelligence tests presented after completion of the RMET, collected for a different study not reported here.

As in the original revised version, each participant was given access to a glossary of the terms used throughout the test, in order to minimize any possible effects deriving from differences in verbal comprehension.

Participants were instructed to choose the mental state term they considered to best describe what the person in the photograph was thinking or feeling, and were required to glance through

the glossary at the beginning of the task. As with the revised version, they were also informed the glossary was available for consultation whenever needed. After this introduction, each participant was placed in an isolated cabinet and proceeded to answer to the RMET, presented on a 17 inch computer screen running at 800x600 screen resolution. Item photographs were presented on a resolution of 464x186 pixels.

Figure 1 shows item 15 of the Portuguese version we developed, and all other items were presented in similar fashion. Answers were collected by means of mouse clicking on the desired option. The test had no time limit.

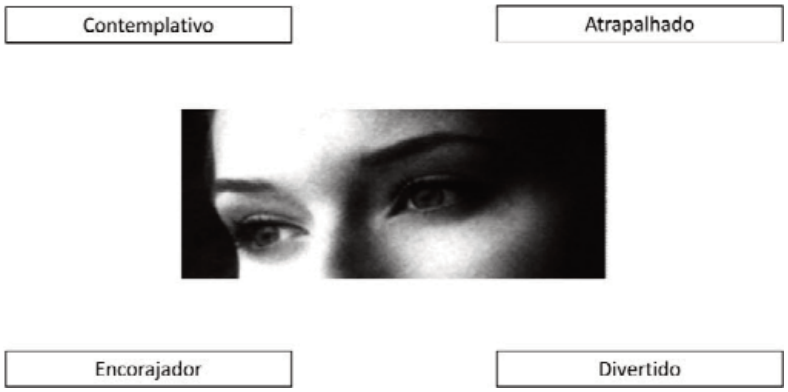

Figure 1. Item 15 of the Portuguese RMET used in this study. The target mental state, in this case, is *Contemplativo*

Results

As in the original study by Baron-Cohen and colleagues (2001), an item validity analysis was conducted, with the criteria that at least 50% of test participants had to choose the target mental state and no more than 25% on any of the foils. Table 1 shows answer frequencies for target and foil terms, for each test item.

Table 1

Mental state expressions and percentage of participants who chose each mental state option in the Portuguese version of the RMET

Item	Target		Foil 1		Foil 2		Foil 3	
Practice	Em pânico	80.0	Invejoso	3.1	Arrogante	7.7	Odioso	9.2
01	Animado	**36.2**	A consolar	23.1	Zangado	**29.2**	Entediado	11.5
02	Transtornado	66.2	Aterrorizado	13.1	Arrogante	3.8	Aborrecido	16.9
03	Desejo	85.4	A brincar	1.5	Atrapalhado	0.8	Convencido	12.3
04	Insistente	76.9	A brincar	0.0	Divertido	3.1	Descontraído	20.0
05	Preocupado	77.7	Zangado	0.0	Sarcástico	17.7	Afável	4.6
06	A fantasiar	90.8	Chocado	0.8	Impaciente	6.9	Alarmado	1.5
07	Inseguro	**49.2**	A pedir desculpa	5.4	Afável	**26.9**	Desanimado	18.5
08	Desencorajado	77.7	Aliviado	6.9	Tímido	9.2	Entusiasmado	6.2
09	Inquieto	65.4	Aborrecido	23.8	Hostil	10.0	Horrorizado	0.8
10	Cauteloso	71.5	Insistente	21.5	Entediado	5.4	Chocado	1.5
11	Pesaroso	76.9	Aterrorizado	4.6	Divertido	10.0	Namoriscador	8.5
12	Cético	72.3	Indiferente	22.3	Embaraçado	3.1	Desanimado	2.3

Table 1 (cont.)

Item	Target		Foil 1		Foil 2		Foil 3	
13	Expectante	80.8	Decidido	5.4	Ameaçador	2.3	Tímido	11.5
14	A acusar	80.0	Zangado	13.1	Desiludido	5.4	Deprimido	1.5
15	Contemplativo	92.3	Atrapalhado	0.0	Encorajador	6.9	Divertido	0.8
16	Pensativo	83.8	Zangado	0.8	Encorajador	0.8	Compassivo	14.6
17	Com dúvidas	**48.5**	Afetuoso	**46.2**	Animado	0.0	Chocado	5.4
18	Decidido	95.4	Divertido	2.3	Chocado	0.0	Entediado	2.3
19	Hesitante	55.4	Arrogante	8.5	Grato	**30.0**	Sarcástico	6.2
20	Afável	95.4	Autoritário	0.8	Culpado	3.8	Horrorizado	0.0
21	A fantasiar	83.8	Embaraçado	13.1	Confuso	3.1	Em pânico	0.0
22	Inquieto	76.9	Grato	2.3	Insistente	5.4	Suplicante	15.4
23	A desafiar	65.4	Satisfeito	2.3	A pedir desculpa	5.4	Curioso	**26.9**
24	Meditabundo	85.4	Zangado	3.8	Entusiasmado	1.5	Hostil	9.2
25	Interessado	88.5	Em pânico	0.0	Incrédulo	8.5	Desencorajado	3.1
26	Hostil	74.6	Alarmado	10.8	Tímido	5.4	Ansioso	9.2
27	Cauteloso	68.5	A brincar	2.3	Arrogante	18.5	Reconfortante	10.8
28	Interessado	88.5	A brincar	2.3	Afetuoso	6.2	Satisfeito	3.1
29	Reflexivo	83.1	Impaciente	8.5	Chocado	3.1	Zangado	5.4
30	Namoriscador	86.9	Grato	5.4	Hostil	4.6	Desiludido	3.1
31	Confiante	70.8	Envergonhado	6.2	A brincar	6.2	Desanimado	16.9
32	Sério	83.1	Envergonhado	1.5	Desnorteado	7.7	Alarmado	7.7
33	Apreensivo	74.6	Embaraçado	3.8	Culpado	16.2	A fantasiar	5.4
34	Desconfiado	73.8	Chocado	3.1	Desconcertado	17.7	Aterrorizado	5.4
35	Nervoso	76.9	Baralhado	6.2	Insistente	4.6	Contemplativo	12.3
36	Suspeitoso	61.5	Envergonhado	7.7	Nervoso	1.5	Indeciso	**29.2**

Note. Mental states answer percentages that did not meet the stipulated criteria are in bold.

All except six items met the stipulated criteria: items 01, 07 and 17 did not obtain neither the minimum of 50% of participants' answers on the target mental state (36.2%, 49.2% and 48.5%, respectively), nor the maximum of 25% on a single foil mental state (29.2%, 26.9% and 46.2%, respectively); items 19, 23 and 36 had more than 50% of answers on the target term but had more than 25% on a single foil as well (30% for item 19, 26.9% for item 23 and 29.2% for item 36).

The mean score for our sample was 27.20 (*SD*=3.44). If we exclude the six problematic items, the mean score for this 30-item version of the RMET was 24.04 (*SD*=2.97). Figure 2 shows the distribution of total scores for the 36 items.

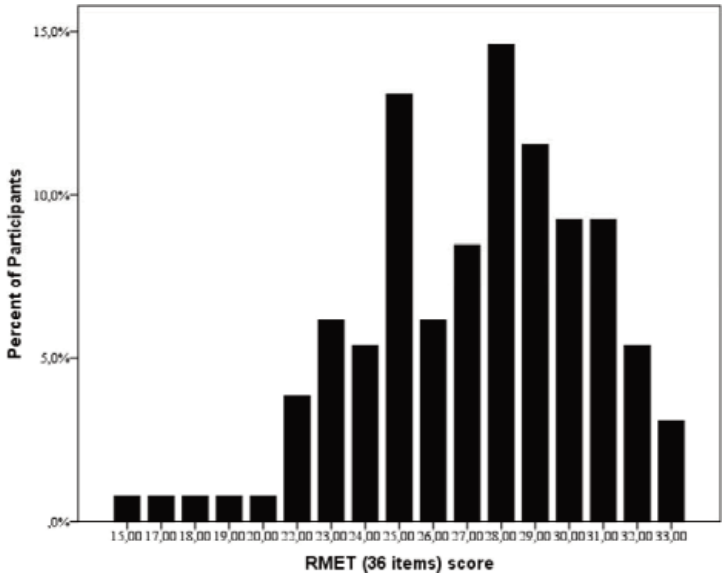

Figure 2. Distribution of the Portuguese 36-item RMET scores (*n*=130)

Gender differences

Table 2 shows the descriptive statistics for the 36-item and for the 30-item RMET versions, for the whole sample and for gender groups.

Table 2

Descriptive statistics for the whole sample and according to gender

				RMET (36 items)			RMET (30 items)		
	N	Age (*SD*)	% w/ academic degree	*M* (*SD*)	Min	Max	*M* (*SD*)	Min	Max
All	130	23.62 (5.92)	23.80	27.20 (3.44)	15.00	33.00	24.04 (2.97)	12.00	29.00
Males	59	26.24 (6.73)	44.10	27.76 (2.93)	22.00	33.00	24.44 (2.49)	19.00	29.00
Females	71	21.44 (4.07)	7.00	26.73 (3.76)	15.00	33.00	23.70 (3.29)	12.00	28.00

Preliminary analysis showed significant differences for age [$t(128)=5.01$, $p<.001$] between men and women, with men being older. Moreover, there was a higher percentage of male participants who already completed a university degree than women (44.1% and 7%, respectively). In order to investigate gender differences in our sample, a regression analysis was performed for both the 36 and 30 item versions of the RMET, controlling for level of education and age (Table 3 and Table 4).

Table 3

Regression analysis for the 36 item version of the RMET, with gender, education level and age (last step) as predictors

	β	*p*	Adjusted R^2	Model *p*	ΔR^2	*p*
Model 1	-	-	.021	.058	-	-
Gender	-.171	.058	-	-	-	-
Model 2	-	-	.020	.112	.006	.372
Gender	-.132	.187	-	-	-	-
Education level	.089	.372	-	-	-	-
Model 3	-	-	.039	.051	.027	.066
Gender	-.185	.074	-	-	-	-
Education level	.195	.090	-	-	-	-
Age	-.214	.066	-	-	-	-

Table 4

Regression analysis for the 30 item version of the RMET, with gender, education level and age (last step) as predictors

	β	*p*	Adjusted R^2	Model *p*	ΔR^2	*p*
Model 1	-	-	.012	.117	-	-
Gender	-.142	.117	-	-	-	-
Model 2	-	-	.013	.171	.009	.300
Gender	-.097	.336	-	-	-	-
Education level	.104	.300	-	-	-	-
Model 3	-	-	.032	.076	.027	.068
Gender	-.149	.150	-	-	-	-
Education level	.210	.069	-	-	-	-
Age	-.214	.068	-	-	-	-

As shown in Table 3 and Table 4, the data provided by the regression analysis does not allow for a relevant explanation of the observed variability in answers to the RMET.

Discussion

The main goal of this study was to translate and investigate item validity of a Portuguese version of the Reading the Mind in the Eyes Test, suited for future research.

Parallel to other translations of the RMET, in the present study most but not all of the items reached both criteria for internal validity (at least 50% of participants' answers on the target mental state and no more than 25% on a single foil, as proposed by Baron-Cohen and colleagues, 2001). With our current translation, six of the 36 items did not meet this standard, with the remaining 30 showing the intended answer distribution. These results are on par with other translated versions, in which the number of items that failed to achieve both criteria ranged from three in the Spanish translation to 15 in the Persian adaptation.

Out of our six problematic items, two came very close to the aforementioned criteria: item 07 got 49.2% of its answers on the target mental state and 26.9% on one of the foils, and item 23 got more than 50% answers on the target, but had 26.9% of responses on one of the foils as well. Another two, items 19 and 36, showed frequencies higher than expected on one of the foil terms, albeit having more than 50% of total answers on the target mental state. Items 01 and 17 were more problematic, with a low percentage of responses (36.2%) on the target mental state for the former, and an almost 50/50 split in participants' answers between the target and one of the foils on the latter.

As referred in the Italian validation (Vellante et al., 2013) and in the Swedish validation of the child version of the RMET (Hallerbäck, Lugnegård, Hjärthag, & Gillberg, 2009), variations on the difficulty of an item may emerge from the original to the translated versions due to cultural differences in the meaning attributed to the mental state terms used in the test. Another study referred that this "cultural impairment" effect may also arise from other features of the RMET, namely physiognomies that may be perceived as other-culture (Adams et al., 2010).

In our current sample, the mean score obtained for the 36 items was 27.20 (*SD*=3.44). The mean scores obtained in the revised version (Baron-Cohen et al., 2001) and other translated versions (Fernández-Abascal et al., 2013; Khorashad et al., 2015; Pfaltz et al., 2013; Prevost et al., 2014; Vellante et al., 2013; Yıldırım et al., 2011; for an item comparison between several of the above mentioned translations and the original, see Khorashad & colleagues, 2015) ranged from 22.76 (*SD*=3.41) on the Persian version to 27.18 (*SD*=3.59) on the Spanish translation. However, in our study only 30 items met Baron-Cohen and colleagues' criteria for item validity. These results can therefore only fully support the use of these 30 items. Thus, mean and standard deviation for the 30 items version of the test should be taken into consideration, if this is the version used for research.

Overall, our results provide initial evidence for a valid Portuguese version of the RMET. However, item validity by itself does not ensure the validity of this task. Future research should investigate this version's convergent validity, for instance with other instruments suited for measuring ToM and empathy, such as the already mentioned FEEL and EQ tasks. Comparison of clinical and nonclinical populations should also be tested for providing evidence of discriminant validity. Moreover, criterion validity should also be addressed within RMET research, for instance by investigating how RMET scores predict the quality of participants' social interactions. Additionally, we were not able to investigate reliability of the presented Portuguese version of the RMET. Future studies should address test-retest reliability of this adaptation.

Contrary to initial expectations, we did not find any female gender advantage in this task. However, not all studies that used the RMET report this significant effect favoring women. In some studies, no effect is found (Ahmed & Miller, 2011; Cook & Saucier, 2010; Kettle, O'Brien-Simpson, & Allen, 2008; Kunihira, Senju, Dairoku, Wakabayashi, & Hasegawa, 2006; Mar, Oatley, Hirsh, dela Paz, & Peterson, 2006; Pfaltz et al., 2013; Smeets, Dziobek, & Wolf, 2009; Stanford, Messinger, Malaspina, & Corcoran, 2011; Valla et al., 2010), while others, in a similar fashion to our present study, report results favoring men, albeit not significantly (e.g., Nettle & Liddle, 2008). Since the effect size for female gender advantage reported in the meta-analysis is relatively small, it might not have been detected in our current sample.

Given that gender groups in our sample differed in terms of level of education and age, we controlled for these variables as well. We found that neither of them contributed to RMET score differences in our study. Concerning level of education, this finding is in agreement with the majority of studies that didn't find formal education to have an impact on participants' performance on the Eyes Test (e.g., Khorashad et al., 2015). In fact, the only study reporting to have found differences related to years of education is the study by Yıldırım and colleagues (2011), where participants with university education had a significantly higher correct response rate than participants with primary and high school education.

Since female participants in our study were younger on average than male participants, we hypothesized that this age difference could imply less experience in reading eye-region expressions in the women of our sample. This could be a possible explanation for the lack of RMET score differences we found between gender groups. However, this was not a factor contributing to the RMET scores in our sample as well. Previous studies have reported differences on RMET scores related to age (Moor et al., 2011; Pardini & Nichelli, 2009), but so far we have no indication of when ToM abilities "peak"; in other words, at what age humans perform best in mental state decoding tasks, and specifically in the RMET.

Notwithstanding, our study shows that the proposed version of the RMET is suited for research within the Portuguese population. Considering the lack of tests translated to Portuguese that assess the ability to read mental states through facial expressions and that simultaneously allow for cross-cultural comparisons, we hope the present study adds an important resource to Portuguese researchers interested in the study of social cognition.

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O Reading the Mind in the Eyes Test: Uma versão portuguesa do teste para adultos

O *Reading the Mind in the Eyes Test* (RMET) é uma tarefa de Teoria da Mente utilizada para avaliar a capacidade de compreender estados mentais de terceiros, tanto em populações normativas como clínicas. O presente estudo teve como objectivo traduzir para Português (Europeu) a versão adulta revista do RMET, investigar a validade dos itens desta versão e diferenças associadas ao género. A versão revista Inglesa foi traduzida para Português e foram realizados 5 estudos piloto de forma a chegar a uma versão final Portuguesa do teste. Após estes procedimentos, 130 participantes adultos (71 mulheres) responderam a uma versão computorizada do RMET. Trinta itens mostraram uma distribuição de respostas adequada, enquanto os restantes seis itens não foram de encontro aos critérios de validação interna considerados. As médias das pontuações obtidas nesta versão do RMET foram semelhantes às conseguidas tanto na versão original revista do teste como noutras traduções. Não foram observadas nesta amostra diferenças significativas entre géneros. Investigações futuras deverão explorar indicadores adicionais de validade e fiabilidade deste instrumento.

Palavras-chave: RMET, Teoria da mente, Cognição social.

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