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A Preliminary Validation of a French Version of the Children's Attributional Style Questionnaire

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Abstract

In the French culture, the absence of a valid measure of children's attributional style has limited the testing of this phenomenon nationally. In this study, a French equivalent of the English language version of the Children's Attributional Style Questionnaire (CASQ; Kaslow, Tannenbaum & Seligman, 1978) was developed using a five-step process. Multiple methods and samples were used to examine the psychometric properties of the questionnaire. To test the content validity of the French version of the CASQ, five experts were asked about the accuracy of the items in terms of psychological and translation quality. Concurrent validity was established in a sample of 47 bilingual children. The questionnaire was then administered on three occasions to two samples of children (n_1 = 118, n_2 = 200) ranging in age from 8 to 12 years. The results demonstrated that the French version of the CASQ has acceptable content and concurrent validity and test-retest reliability. However, consistent with a number of previous studies of the English language version of the CASQ, the internal consistency reliabilities of the scales and subscales of the French version were less than optimal.

Keywords: Psychometric Proprieties, Explanatory Style, Validation, French version of CASQ.

There are many examples of ongoing psychological research that fit under the positive psychology umbrella. One important theory that belongs

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to this positive psychology framework is the reformulated theory of learned helplessness (Abramson, Seligman, & Teasdale, 1978) which is based on attribution theory. Attributions are the causes or reasons individuals posit to explain why particular positive or negative events occur in their lives. Learned helplessness theory makes predictions about the emotional and behavioral development of individuals and has been successfully applied across multiple populations including adults, adolescents and children in both normal and clinical samples. For example (Abramson, Seligman, & Teasdate, 1978) applied their reformulated helplessness theory to predict depression. They found that adults who habitually explained negative events by attributing to internal, stable and global causes were more prone to depressive episodes than those who did not exhibit this maladaptive or pessimistic explanatory style. This finding has been confirmed in numerous studies with adults and also with children (e.g., Peterson 1991; Seligman, Peterson, Kaslow, Tanenbaum. Alloy,& Abramson, 1984).

The most commonly used measure of children's Attributional or explanatory style is the Children's Attributional Style Questionnaire (CASQ, Kaslow, Tannenbaum, & Seligman, 1978). Several studies using the CASQ have indicated that children with a more pessimistic explanatory style report more depressive symptoms (e.g., Nolen-Hoeksema, Girgus, & Seligman, 1986; Seligman et al., 1984). For example, Peterson and Steen (2002) found that children who possess a pessimistic attributional or explanatory style, whereby habitually view the causes of bad events as stable in time, global in effect and internal to themselves were especially vulnerable to a defined cluster of helplessness deficits that are predictive of depression. In the academic domain, explanatory style has also been used to explain deficits in achievement oriented behavior (e.g., Dweck, 2000). Many studies show that the explanatory patterns consistent with a pessimistic style correlate with decreased persistence, decreased initiation of tasks, lowered quality of problem-solving strategies, and lowered expectations for future success (Johnson, 2005; Salama-Younes, 2005).

Although explanatory style is relatively stable in time, intervention studies with children and adolescents have demonstrated considerable efficacy in promoting a more optimistic explanatory style (e.g., Cunningham, Brandon, & Frydenberg, 2002; Jaycox, Reivich, Gillham, & Seligman, 1994; Gillham, Reivich, Jaycox, & Seligman, 1995). Importantly, intervention programs that have successfully improved explanatory style in young people concurrently report improvements on a range of psychosocial measures related to resilience including improved problem solving, social skills and coping self-efficacy (Cunningham et al., 2002; Peterson & Steen, 2002; Seligman, 1995) as well as decreased depressive symptoms and less reliance on non-productive coping behaviors (Cunningham et al., 2002; Gillham et al., 1995). Overall, empirical research has provided strong support for the notion that an optimistic explanatory style is a key protective factor for depression in children.

The Children's Attributional Style Questionnaire (CASQ; Kaslow, Tennenbaum, & Seligman, 1978) was the first questionnaire to measure explanatory style in Anglo-Saxon children and continues to be widely used today (Thompson, Kaslow, Weiss, & Nolen-Hoeksema, 1998). In the French culture, however, no measurement instrument exists to evaluate children's explanatory style. Hence the primary purpose of this study is to develop a French version of the CASQ. The procedure for translation and adaptation of the CASQ follows the cross-cultural validation methodology of psychological instruments suggested by Vallerand (1989). Furthermore, when a questionnaire is translated or adapted from another culture or language, it also requires validation within the culture for which it has been adapted (Vallerand, 1989). Therefore the second aim of the current study is to examine the psychometric properties of the French version of the CASQ.

Method

Participants

Three samples of children participated in the study. The first sample was involved in the construction of the French version of the CASQ and

comprised a total of 118 children (66 boys and 52 girls) aged between 9 and 12 years (*M* = 10.10 years, *SD*= 0.70). The second sample of 47 bilingual children (*M* = 10.30 years, *SD* = .40) from Paris was involved in establishing concurrent validity for the questionnaire. For this sample, participants' capabilities in writing, reading, comprehension, and expression of the English and French languages were first confirmed. The third sample of 200 children (106 girls and 94 boys; *M* = 10.10 years; *SD* = 0.80) participated in establishing reliability for the translated questionnaire.

Instrument

The Children's Attributional Style Questionnaire (CASQ; Kaslow et al., 1978). The CASQ is a self-report measure consisting of 48 items of equal numbers of hypothetical positive and negative events. For each item, respondents are required to choose between two possible reasons for the cause of the hypothetical event. The CASQ is scored by assigning 1 to each internal, stable, or global response, and 0 to each external, unstable, or specific response. Scales are formed by summing the three scores across the appropriate questions for each of the three dimensions for composite positive (CP) and composite negative (CN) events separately. An overall score (CPMCN) is calculated by subtracting the score for the negative events from the score for the positive events (Nolen-Hoeksema et al., 1986; Peterson, Maier, & Seligman, 1993). For the English version of the CASQ, respective test-retest correlations of .71 and .66 over a six-month period have been reported for the positive and negative composite scores together with internal consistency reliability coefficients ranging from .47 to .73 for the composite positive, .42 to .67 for the composite negative, and .62 for the overall score (Nolen-Hoeksema, Girgus, & Seligman, 1992).

Results

Development of the French version of the CASQ

As recommended by Vallerand and his colleagues (Vallerand & Halliwell, 1983; Vallerand, 1989), three steps were followed to create an

experimental French version of the CASQ that might be equivalent to the English language version of the instrument. These steps were (1) reversed translation, (2) evaluation of the preliminary versions, and (3) evaluation of the clarity of the items.

In the first step, the original version (English) was initially translated into the target language (French) by two bilingual individuals familiar with the field of study. The translation of the English word "you" was represented in both French translations by "vous", the formal version of "you", whereas the familiar form of "tu" is more appropriate. In addition, the original English version of the CASQ did not contain administration instructions for children. Therefore, "vous" was changed to "tu" for all items and instructions were prepared for the French version. Two additional bilingual individuals experienced in the area then re-translated these versions back into English without having seen the original version. Thus, we now had two French versions of the CASQ and two English back-translations.

To evaluate these preliminary versions of the CASQ (step 2), four translators and two researchers in the psychosocial domain composed a committee to establish a single French version. Once a single French version of the CASQ was established by the committee, it was submitted to the director of a primary school who was a linguistic expert of children's language. After taking into account feedback that certain words were inappropriate for children in the target age group, the CASQ was given to a bilingual linguistic expert to check the quality of statements formulating the 48 items. However, sometimes there is a discordance between the perception of items by the individuals for whom the questionnaire is developed and the researcher and/or committee's interpretation of the items (e.g., Fontayne, Martin-Krumm, Heuzé, & Painset, 2003). Therefore it is essential to check the way in which children perceive the meaning of the items (step 3).

To determine if the items in the new French version of the CASQ were clear and meaningful to children, the target population, three different techniques proposed by Vallerand (1989) were employed. Firstly, 118

children (sample 1) circled any words that were not clear or that they did not understand. Words were considered difficult to understand if more than a quarter of the children circled them (e.g., items 1, 31, 33). Two experts then modified the relevant words to make them more comprehensible to children. In the next step, 94 children from sample 1 rated the clarity of the items on a three-point scale. A rating of one indicated the sentence was not clear, two indicated the sentence was clear, and three indicated the sentence was very clear. If 25% or more of the children circled "1" for any of the items, those items were then reformulated. Item 24 was the only item considered to be incomprehensible using this criterion.

Finally, test-retest correlations were used to determine if children responded to the questionnaire in a similar manner across time. The rationale for this step is based on the assumption that items lacking clarity would have extremely weak test-retest correlations. Seventy-six children from sample 1 completed the latest version of the questionnaire twice with a two-week interval between administrations. The test-retest correlations for the six subscales ranged from a low of .48 for the internal negative scale to a high of .67 for the global positive scale and thus demonstrated adequate stability. Hence, we had now assessing a French version of the CASQ that was deemed equivalent to the original English version and was comprehensible and appropriate for the target population.

Concurrent Validity:

Although concurrent validity can be demonstrated by examining associations of the French version of the CASQ with other French scales from the psychosocial domain, Laveault and Gregoire (2002) and Vallerand (1989) both confirmed that concurrent validity can be demonstrated using bilingual individuals. Involving bilingual individuals in the validation of a translated questionnaire offers many advantages, in particular the ability to clearly show the cross-cultural equivalence between the translation and the original (Houccun, 1987; Vallerand & Hess, 2000). In particular, correlations can be calculated between the

responses to the English and French versions for each item to determine if there is congruence between the two versions. When the answers to a questionnaire are dichotomous, which is the case here, coefficient □ is recommended as the measurement of association (Bernier & Pietrulewicz, 1997; Laveault & Gregoire, 2002) and a significant value of □² indicates that the measures are not independent (Howell, 1997).

The French and English versions of the CASQ were presented in a counterbalanced order to the 47 bi-lingual children in sample 2 (i.e., 24 children first completing the original version then the French version, and 23 children completing the French version and then the English version). Table 1 shows the χ^2 statistics and ϕ coefficients for each of the corresponding English and French items on the CASQ. In particular, the ϕ coefficients, which were all statistically significant, ranged from .56 to .95 and indicated that associations between the English and French items of the CASQ were relatively strong. These results attest to high congruence indicating satisfactory concurrent validity for each item of the French version of the CASQ.

Reliability

Internal consistency and temporal stability need to be determined in the trans-cultural validation of psychological measures (Laveault & Gregoire, 2002; Vallerand & Halliwell, 1983; Vallerand, 1989). While Cronbach's alpha is commonly used to determine internal consistency (homogeneity), Vallerand (1989) and Bernier and Pietrulewicz (1997) noted that if the questionnaire is dichotomous, the use of Kuder and Richardson's formula, the KR-20, is preferable. For temporal stability, a number of authors have suggested that one month is an appropriate time interval to demonstrate test-retest reliability or the stability of results over time (Laveault & Gregoire, 2002; Vallerand & Hess, 2000).

The third sample of 200 participants completed the French version of CASQ twice with an interval of four to five weeks between the tests. A further 131 children from this sample completed the CASQ six months after the initial administration. All questionnaires were completed in class

groups. The internal consistencies (KR-20) and test-retest correlations across time are displayed in Table 3.

Table 1
χ^2 and ϕ Values for Item Pairs from the English and French Versions of the CASQ

item	χ^2	ϕ	item	χ^2	ϕ	item	χ^2	ϕ
1	33.92	.88	17	29.07	.79	33	29.13	.79
2	33.92	.85	18	19.49	.64	34	25.28	.73
3	42.63	.95	19	25.83	.74	35	38.92	.91
4	30.16	.80	20	26.48	.75	36	12.25	.51
5	23.88	.71	21	37.73	.90	37	29.64	.79
6	31.27	.81	22	21.81	.68	38	39.08	.91
7	22.18	.69	23	22.28	.69	39	32.16	.83
8	15.81	.58	24	26.09	.75	40	34.73	.86
9	25.62	.74	25	29.56	.79	41	32.31	.83
10	17.77	.61	26	24.33	.72	42	31.37	.82
11	34.84	.86	27	21.05	.67	43	28.45	.78
12	14.93	.56	28	36.43	.88	44	21.05	.67
13	28.64	.78	29	39.08	.91	45	29.67	.79
14	35.53	.87	30	24.33	.72	46	16.42	.59
15	29.09	.79	31	25.83	.74	47	30.27	.80
16	24.34	.72	32	14.64	.56	48	28.32	.78

Table 2
Overall and Sub-Scale Correlations (Validity Coefficients between the French and the English Version of CASQ)

Scale	Global (positive)	Internal (positive)	Stable (positive)	Global (negative)	Internal (negative)	Stable (negative)
r =	.67*	.51*	.55*	.59*	.48*	.54*

* $p < .01$

As it can be seen in Table 2 all the validity coefficients are significant at the less than 0.01 significance level.

Table 3
Internal Consistency and Temporal Stability (reliability) Across Time for the French CASQ

	Internal consistency (KR-20)		Temporal stability (test-retest)	
Scales	Initial test	4-5 weeks	4-5 weeks	At 6months
Global (positive)	.48	.35	.74	.52
Internal (positive)	.32	.30	.57	.46
Stable (positive)	.51	.37	.68	.47
Global (negative)	.38	.38	.64	.52
Internal (negative)	.30	.23	.59	.35
Stable (negative)	.42	.43	.71	.50
Composite Positive	.56	.43	.74	.49
Composite Negative	.55	.48	.66	.59
Total score	.57	.50	.62	.57

Table 3 shows that at the time of initial testing and again 4-5 weeks after initially testing, the KR-20 internal consistency reliability coefficients for the six subscales and the composite scores ranged from .30 to .57 and .23 to .50, respectively. The temporal stability coefficients for these scales ranged from .57 to .74 over the 4-5 week interval and from .35 to .59 for a six-month interval.

Discussion

A French version of the CASQ was developed from the English language version by following the methodology for trans-cultural questionnaire translation and validation (Vallerand, 1989). Various experts agreed that, after rewording or modifying four of the items, the translated items were true to the original English items and captured what they were hypothesized to measure according to the definitions of the concepts

provided. Equally, despite certain modifications to enhance understanding by the target population and to improve translation quality, at no time did two (or more) experts question the content validity of particular items and hence no items were removed. Concurrent validity was also supported when the associations between paired item responses from bilingual children to the English and French versions of the CASQ were moderate to strong for all items. Taken together, these findings suggest that the French translation of the English version of the CASQ reflects the content and intent of the original English version.

The internal consistency reliabilities for the subscales of the French version of the CASQ were consistently below the suggested minimum value of .70 that is desirable for research purposes. This finding is congruent with findings reported in the English language version. For this reason, many researchers suggest using the composite score for the negative and the positive events (e.g., Gladstone & Kaslow, 1995; Nolen-Hoeksema et al., 1992). When composite positive and negative internal consistency reliability coefficients were compared, the internal consistency reliabilities for the French version initially and at six months were somewhat lower than those of the original English version (Nolen-Hoeksema et al., 1992). In the majority of cases where the version in the second language is not identical to the original, the indices of reliability would be expected to be a little weaker than those of the original one (Vallerand, 1989; Bernier & Pietrulewicz, 1997). However, the internal consistency reliabilities were generally of the same magnitude as those previously reported in American (e.g., Nolen-Hoeksema et al., 1992), French (Salama-Younes, Martin-Krumm, & Roncin, 2004 a; 2004b; 2006, Salama-Younes, Martin-Krumm, Hanrahan, & Roncin, 2006) and Australian studies (Cunningham, 2003). In addition, the moderately strong test-retest correlations for the composite scores were also of similar magnitude to previously reported indices of temporal stability (e.g., Nolen-Hoeksema et al., 1992).

In summary, the findings from the study would suggest that the French version of the CASQ is an accurate translation of the original version that

was published in English. The psychometric properties that were examined for the French translation of the questionnaire are comparable to those reported for the English version of the CASQ. The main concern with both versions of the questionnaire is that internal consistency reliabilities for the various scales and subscales are below commonly recommended minimums. Irrespective of language or culture, the challenge remains for researchers to design a measure of children's attributional style that has more desirable psychometric properties. Three studies are in hand to test its construct validity.

References

Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87*, 49-74.

Bernier, J., & Pietrulewicz, B. (1997). *La psychométrie, traité de mesure appliquée*[thé psychometric, treatment of applicable measurement], Gaëtan Morin éditeur, Montréal, Paris, Casablanca.

Cunningham, E. G. (2003). Psychometric properties of the Children's Attributional Style Questionnaire. *Psychological Reports, 93(2),* 481-485.

Cunningham, E. G., Brandon, C. M., & Frydenberg, E. (2002). Enhancing coping resources in early adolescence through a school-based program teaching optimistic thinking skills. *Anxiety, Stress and Coping, 15,* 369-381.

Dweck, C. S. (2000). *Self theories: their role in motivation, personality, and development.* Philadelphia: Psychology Press.

Fontayne, P., Martin-Krumm, C., Heuzé, J-P, & Painset, G. (2003). Validation française de la version révisée de l'échelle de mesure des attributions causales (CDSII). *Les cahiers internationaux de psychologie sociale, 58*, 59-72.

Gillham, J. E., Reivich, K. J., Jaycox, L. H., & Seligman, M. E. P. (1995). Prevention of depressive symptoms in school children: Two-year follow-up. *Psychological Science, 6*, 343-351.

Gladstone, T. R. G., & Kaslow, N. J. (1995). Depression and attributions in children and adolescents: A meta-analytic review. *Journal of Abnormal Child Psychology, 23*, 597-606.

Haccoun, R. R. (1987). Une nouvelle technique de vérification de l'équivalence de mesures psychologiques traduites. *Revue québécoise de psychologie, 8(3),* 30-39.

Howell, D. C. (1997). *Méthodes statistiques en sciences humaines* (M. Rogier, trans.).De Boeck université. (Original work published 1996).

Johnson, M. B. (2005). Optimism, adversity and perfromance : Comparing explanatory style and AQ, The Faculty of the Department of Psychology, Master of arts, San Jose State University.

Jaycox, L. H., Reivich, K. J., Gillham, J., & Seligman, M. E. P. (1994). Prevention of depressive symptoms in school children. *Behavior Research Therapy*, *32*, 801-816.

Kaslow, N. J., Tennenbaum, R. L., & Seligman, M. E. P. (1978). *The KASTAN: A children's attributional style questionnaire*. Unpublished manuscript, University of Pennsylvania.

Laveault, D., & Grégoire, J. (2002). *Introduction aux théories des tests en psychologie et en éducation*, De Boeck Université.

Nolen-Hoeksema, S., Girgus, J. S., & Seligman, M. E. P. (1986). Learned helplessness in children: A longitudinal study of depression, achievement, and explanatory style. *Journal of Personality and Social Psychology*, *51*, 435-442.

Nolen-Hoeksema, S., Girgus, J. S., & Seligman. M.E.P. (1992). Predictors and consequences of childhood depressive symptoms. *Journal of Abnormal Psychology*, *101*, 405-422.

Peterson, C. (1991). The meaning and measurement of explanatory style. *Psychological Inquiry*, *2*, 1-10.

Perterson, C., & Steen, T. A. (2002). Optimistic Explanatory Style. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of Positive Psychology*, 244-256. Oxford University Press.

Peterson, C., Maier, S. F., & Seligman, M. E. P. (1993). *Learned helplessness: A theory for the age of personal control*. New York: Oxford University Press.

Salama-Younes, M. (2005). Validation et adaptation d'un outil de mesure (CASQ) évaluant les modes explicatifs chez les enfants sportifs et application à la prédiction des résultats sportifs et scolaires [Validation and adaptation of Children's Attributional Style Questionnaire for sport children and application to predict the sport and school results], PhD thesis, STAPS, RennesII University, France.

Salama-Younes, M., Martin-Krumm, C., & Roncin, C. (2004a). Psychometric properties of an experimental version of “CASQ”. The scale of measurement of the Explanatory Mode for Children from 8 to 12 ans. *Second European Conference on Positive Psychology, Verbania Pallanza,* Italy, July 2004.

Salama-Younes, M., Martin-Krumm, C., & Roncin, C. (2004b). Mode explicatif optimiste, neutre et pessimiste chez les enfants: validation transculturelle et épure d’une version française du « Children’s Attributional Style Questionnaire », *V ème Congrès International de Psychologie Sociale de langue française,* Lausanne, Suisse, Septembre 2004.

Salama-Younes, M., Martin-Krumm, C., Hanrahan, S., & Roncin, C. (2006). Children’s explanatory style in France: psychometric proprieties of the Children’s Attributional Style Questionnaire and reliability of a shorter version. In Delle Fave, A., (Ed.) *Dimensions of well-being. Research and intervention*. (pp.191-207). Milano: Franco Angeli. ».

Seligman, M. E. P., Peterson, C., Kaslow, N. J., Tanenbaum, R. L., Alloy, L. B., & Abramson, L. Y. (1984). Attributional style and depressive symptoms among children. *Journal of Abnormal Psychology, 93*, 235-238.

Seligman, M. E. P., Reivich, K., Jaycox, L., & Gillham, J. (1995). *The optimistic child*. New York: Harper Perennial.

Shatté, A. J., Reivich, K., Gillham, J. E., & Seligman, M. E. P. (1999). Learned optimism in children. In C.R. Snyder (Ed.), *Coping: The psychology of what works*. New York: Oxford University Press.165-181.

Thompson, M., Kaslow, N. J., Weiss, B., & Nolen-Hoeksema, S. (1998). Children's Attributional Style Questionnaire-Revised: Psychometric examination. *Psychological Assessment, 10, (2),* 166-170.

Vallerand, R. J. (1989). Vers une méthodologie de validation transculturelle de questionnaires Psychologiques : implications pour la recherche en langue française [Toward a cross-valiadtion method for

the psychological questionnaire : implications for the french language research].*Canadian Psychology, 30,* 662-680.

Vallerand, R., J. & Halliwell, W. R. (1983). Vers une méthodologie de validation transculturelle de questionnaires psychologiques : implications pour la Psychologie du Sport, [Toward a cross- cultural validation method for the psychological questionnaire : implications for the sport psychology].*Canadien Journal of Applied Sport Science*, 8 :19-18.

Vallerand, R. J., & Hess, U. (2000). *Méthode de recherche en psychologie* [method of research in psychology]. Montréal: Gaëtan Morin.

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