

Research report

Suitability of the TEMPS-A for population-based studies: Ease of administration and stability of affective temperaments in its Lebanese version

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Abstract

Background: The Temperament Evaluation of Memphis Pisa Paris and San Diego Auto-questionnaire (TEMPS-A) has been translated and validated into several languages, and used in different subgroups (e.g. clinical, students, company, employees and those with different educational levels).

Methods: Lebanon is the only country that has validated the TEMPS-A in a national cohort, as part of the Lebanese Evaluation of the Burden of Ailments and Needs Of the Nation (LEBANON). In this paper, we test the suitability of the TEMPS-A for large scale epidemiologic population-based studies.

Results: 82.1% of the respondents found the TEMPS-A to be easy to understand. The global reports of the Lebanese of their own temperaments paralleled those of the formal sub-scores on the five affective temperament subscales. The majority of respondents (90.3%) felt that their answers on the Lebanese–Arabic TEMPS-A scale represented them throughout their adulthood; the minority who did not were more likely to be older, and to have scored higher on the cyclothymic, and lower on the hyperthymic subscales.

Limitation: Although the TEMPS-A has been designed for self-administration (auto-questionnaire), this was not practical in all subjects. We nonetheless feel that the interview format is viable as it introduces flexibility with certain subjects in population studies.

Conclusions: The TEMPS-A appears to be suitable for use in epidemiologic surveys and research.

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1. Introduction

The study of temperament has gained interest from psychologists and psychiatrists recently, not only for the better understanding of normal human behavior but also as a possible risk factor for psychopathology (Caspi et al.,

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1995). An important development in the field is the concept of Affective Temperaments as defined by Kretschmer (1936), which has been recently operationalized (Akiskal and Mallya, 1987), and assessed using a newly developed auto-questionnaire, the TEMPS-A or Temperament Evaluation of Memphis Pisa Paris and San Diego (Akiskal et al., 1979; Akiskal and Akiskal, 1992; Akiskal et al., 2005a,b). The TEMPS-A is a self-filled questionnaire translated into various national languages and used in clinical and epidemiologic research (Akiyama et al., 2005; Bloink et al., 2005; Erfurth et al., 2005; Karam et al., 2005; Kochman et al., 2005; Matsumoto et al., 2005; Vahip et al., 2005). Our group, IDRAAC (Institute for Development, Research, Advocacy and Applied Care), had translated and adapted the TEMPS-A into Lebanese–Arabic and has recently conducted a national assessment of temperament in Lebanon as part of the national LEBANON study (Lebanese Evaluation of the Burden of Ailments and Needs Of the Nation, Karam et al., 2005; Karam et al., 2006; WMHI, 2004). The LEBANON study has two components: the LEBANON World Mental Health component, as measured by the Composite International Diagnostic Interview (CIDI, WMHI, 2004), and the LEBANON-TEMP, as measured by the Lebanese–Arabic TEMPS-A (Karam et al., 2005).

Our group has published extensively on various mental health disorders in Lebanon, including depression, panic, post-traumatic stress disorder, substance use and abuse (in children, adolescents and adults) and their possible relation to environmental stressors including war (Karam, 1994; Karam et al., 1996; Karam et al., 1998; Karam et al., 2000; Karam and Bou Ghosn, 2003; Karam et al., 2004; Weissman et al., 1996). The LEBANON study assesses for the first time the common mental health disorders nationally to make comparisons with our previous findings and to draw a map of the temperaments in Lebanon, thereby exploring various possible associations at individual and national levels (Karam et al., 2006).

First results from our national data on the 1320 Lebanese adults representing all Lebanese (≥ 18 years) showed good internal consistency of the Lebanese–Arabic TEMPS-A scale (Karam et al., 2005). The formal total scores of our sample (mean age 43 ± 16 years) were highest on the hyperthymic temperament subscale (12.5 ± 4.5) and lowest on the irritable temperament subscale (2.8 ± 3.1). Females ($N=727$, mean age 43 ± 16 years) had higher mean scores on the depressive, cyclothymic and anxious subscales, whereas males ($N=593$, mean age 44 ± 17 years) had higher scores on the hyperthymic subscale; there was no difference in scoring between the sexes on the irritable subscale. Our group incorporated additional

sections to the Lebanese–Arabic TEMPS-A which helped answer the following questions in the present report:

1. How difficult were the Lebanese–Arabic TEMPS-A items to understand?
2. What would the Lebanese choose as a global subjective impression about their own temperament and how does that compare with their formal scoring on the TEMPS-A?
3. The degree to which respondents in this Lebanese national sample feel their answers on the Lebanese–Arabic TEMPS-A best represent them throughout their adulthood (since age 18 years)? And if not, why?

2. Methods

2.1. Measures and sample

The Lebanese–Arabic TEMPS-A is a 121-item questionnaire for women and 120 items for men (Karam et al., 2005) which constitute the descriptive ingredients of five affective temperamental scales: depressive (21 items), cyclothymic (21 items), hyperthymic (21 items), irritable (21 items) and anxious (26 items). In addition, the TEMPS-A includes a question that asks the respondents to choose only one global subjective impression about their own temperament. Our group added a section to the original TEMPS-A that all respondents were verbally asked by trained interviewers (conducting the psychopathology and temperament components). This section asks the respondents whether their answers on the TEMPS-A represented them most of their life after age 18 years (Group I), or whether these answers represented only part of their life [starting at age 18 years but not up to when they were given the interview (Group II), or starting later than age 18 years but up to when they were given the interview (Group III)], or whether their answers would have changed all the time (Group IV). In addition, they were asked about the reason(s) for them belonging to Group II, III or IV; whether it was due to illness, age, medications (close-ended questions) or to “other reasons” (open-ended questions). Lastly, further questions were added to inquire about the mode of administration and the reasons for it (self-filled vs. read by interviewer) and the difficulty the respondents had in understanding the questions in the Lebanese–Arabic TEMPS-A (see Appendix A for the English version of the question on global subjective impressions and the English translation of the additional questions, and Appendix B for the Lebanese–Arabic version of the

Table 1
Factors linked to difficulties in understanding the Lebanese–Arabic TEMPS-A items

Variable	OR	[95% CI]	P-value
Age (years)	1.01	[0.99,1.02]	0.2
Gender			
Male=1, female=2	0.77	[0.51,1.16]	0.2
Education (years)	0.89	[0.86,0.93]	<0.0001
Depressive sub-score	1.08	[1.00,1.17]	0.04
Cyclothymic sub-score	1.04	[0.97,1.10]	0.3
Hyperthymic sub-score	0.90	[0.86,0.94]	<0.0001
Irritable sub-score	1.03	[0.95,1.11]	0.5
Anxious sub-score	1.02	[0.97,1.07]	0.4
Marital status			
Single	1.00	–	–
Married	1.11	[0.62,2.01]	0.7
Separated/divorced	1.76	[0.29,10.7]	0.5
Widowed	1.15	[0.45,2.92]	0.8
Mode of delivery			
Self-filled=1, interviewed=2	0.28	[1.14,2.72]	0.01

question on global subjective impressions and the additional questions).

A total of 1334 respondents (47% of the total national sample) were selected from the specific study for the assessment of temperament, namely the LEBANON-TEMP; of these, nine respondents refused to take the TEMPS-A and five had incomplete questionnaires, reducing the sample to 1320 (for more information, see Karam et al., 2005). The section that asks the respondents whether their answers on the TEMPS-A formal scoring represented them most of their life after age 18 years was answered by 1143 respondents. The 177 respondents who did not have an answer for this section had been either given an earlier version of the instrument that did not include this question ($N=173$), refused to answer ($N=1$) or had a missing answer ($N=3$). There were no age or gender differences between those who answered this question and those who had been given an earlier version that did not include this question.

Data collection (CIDI and TEMPS-A) was completed between September 2002 and June 2003. Recruitment and consent procedures were approved by the Institutional Review Board (IRB) committee of the Saint George Hospital University Medical Centre/Faculty of Medicine, Balamand University, Lebanon, which is registered with the U.S. Office of Human Research Protections (OHRP) in the Department of Health and Human Services.

2.2. Statistical analysis

Differences between means were measured by Student's *t*-test and ANOVA, and ANCOVA was used to adjust for age. Differences in frequencies were tested

using Chi-square test. Binary logistic regression was used to determine the predictors of having the TEMPS-A as an interview, the exploratory variables being; age (years), gender, marital status, years of education, total formal score on each of the temperament subscales and difficulty in understanding the TEMPS-A items. Also it was used to determine the predictors of subjective fluctuation of the formal scoring of TEMPS-A; the exploratory variables being age (years), marital status, gender, years of education, difficulty in understanding the TEMPS-A items, whether it was self-filled or not, and the total formal score on each of the temperament subscales. All analyses were conducted using SPSS version 11.0, and significance was set at a 95% confidence interval.

3. Results

3.1. How difficult were the Lebanese–Arabic TEMPS-A items to understand?

Self-filled vs. interviewed: 569 respondents (43.1% of the sample) preferred that the Lebanese–Arabic TEMPS-A be read to them: 263 (19.9% of the sample) had “no desire” to read, 137 (10.4% of the sample) respondents were illiterate, 75 (5.7% of the sample) respondents had difficulty in reading because of “old age” and 94 (7.1% of the sample) had “other” reasons. There was no difference in the gender distribution between those who self-filled the TEMPS-A and those who preferred to have the questions read to them. The mean age of the former (mean age 37.8 ± 13.9) was

Table 2
Factors linked to the preference of having the TEMPS-A as an interview vs. being self-filled

Variable	OR	[95% CI]	P-value
Age (years)	1.03	[1.02,1.05]	<0.0001
Gender			
Male=1, female=2	1.06	[0.78,1.45]	0.7
Education (years)	0.88	[0.86,0.91]	<0.0001
Depressive sub-score	1.07	[1.00,1.14]	0.05
Cyclothymic sub-score	0.96	[0.91,1.01]	0.1
Hyperthymic sub-score	1.00	[0.97,1.04]	0.8
Irritable sub-score	1.00	[0.93,1.06]	0.9
Anxious sub-score	0.97	[0.93,1.01]	0.1
Marital status			
Single	1.00	–	–
Married	0.72	[0.48,1.08]	0.1
Separated/divorced	0.49	[0.12,2.01]	0.3
Widowed	1.12	[0.48,2.65]	0.8
Difficulty in understanding items			
No difficulty	1.00	–	–
Some difficulty	1.80	[1.17,2.77]	0.007
So much difficulty	2.95	[0.35,24.9]	0.3

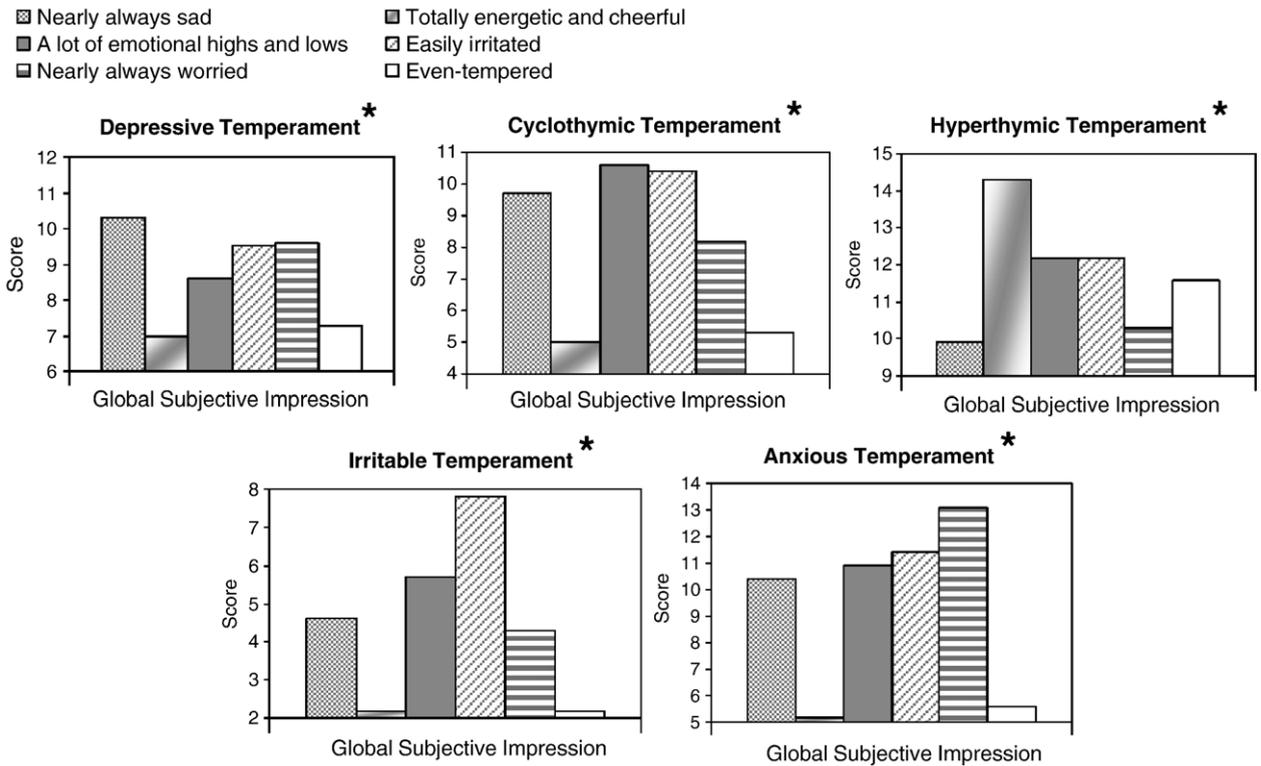


Fig. 1. Global subjective impression of affective temperament. The depressive subscale has 21 items, cyclothymic 21, hyperthymic 21, irritable 21 and anxious 26 items. * $P < 0.0001$ by ANOVA.

significantly lower than the latter (mean age 49.9 ± 17.0), $P < 0.001$. The self-filled group had lower scores on the depressive subscale (7.2 vs. 8.0, $P < 0.001$), and higher scores on the irritable (3.0 vs. 2.5, $P = 0.002$), than the interviewed group, but did not differ on the other subscales. When adjusting for age, older individuals scored lower on the irritable subscale and preferred being interviewed (data not shown and available upon request). 75% of the separated/divorced, 71.3% of the single, 54% of the married and 23.9% of the widowed filled the TEMPS-A by themselves.

Difficulty of understanding the items: 82.1% of the respondents stated they did not have any difficulty understanding the Lebanese–Arabic TEMPS-A items, 16.6% some difficulty and the remaining 1.3% reported that the items were very difficult to understand. More of those who preferred to be interviewed (24.5% vs. 9.4%) reported some difficulties in understanding the TEMPS-A items. Predictors of finding any difficulty in understanding the TEMPS-A items are shown in Table 1.

Those who self-filled the TEMPS-A were younger, with a higher educational level (Table 2).

Table 3
Respondents' impressions on the time frame best representing their temperament^a

N (%)	Age group (years) [*]				
	18–30	31–40	41–50	51–60	60+
Group I: age 18 years—now ^b	280 (94.6)	263 (93.6)	200 (88.1)	126 (84.6)	163 (85.8)
Group II: age 18 years—before now	2 (0.7)	4 (1.4)	5 (2.2)	3 (2.0)	5 (2.6)
Group III: later than age 18 years—now	6 (2.0)	13 (4.6)	17 (7.5)	14 (9.4)	17 (8.9)**
Group IV: always changing	8 (2.7)	1 (0.4)	5 (2.2)	6 (4.0)	5 (2.6)

^a Measured by their answers on the Lebanese–Arabic TEMPS-A.

^b Now refers to the time when they were interviewed.

* $P = 0.005$.

** Group III differed significantly from group I ($P = 0.002$).

3.2. What would the Lebanese choose as a global subjective impression about their own temperament and how does that compare with their formal scoring on the TEMPS-A?

3.9% of respondents (mean age: 48 ± 15 years) chose “I am nearly always sad” (5.0% of females, 2.5% of males) as a global subjective impression about their own temperament; almost half of the respondents (48.5%, mean age: 44 ± 17 years) chose “I am an even-tempered person” (49.6% of females, 47.2% of males); 4.6% (mean age: 43 ± 15 years) chose “I am nearly always worried” (5.8% of females, 3.1% of males); 34.3% (mean age: 42 ± 16 years) chose “I am a totally energetic and cheerful person” (29.4% of females, 40.4% of males); 4.4% (mean age: 39 ± 15 years) chose “I am easily irritated, small things set me off” (4.8% of females, 3.9% of males); and 4.3% (mean age: 39 ± 14 years) chose “I have a lot of emotional highs and lows” (5.4% of females, 2.9% of males). Mean age differed significantly ($P=0.008$) across the six subjective impressions and was highest among those who chose “I am nearly always sad” followed by “even-tempered”. 62.5% of separated/divorced, 52.7% of widowed, 48.7% of married and 46.1% of single respondents chose “I am an even-tempered person” as a global subjective impression about their own temperament.

As shown in Fig. 1, the single item that was chosen to give the global subjective impression about one’s temperament corresponded always to the temperament the respondents scored highest on, that is on the formal subscale (range 21 to 26 items) of that same temperament.

3.3. How much did the respondents’ answers on the Lebanese–Arabic TEMPS-A represent them best since age 18 years?

Out of the 1143 respondents, 1032 (90.3%) reported that their answers on the TEMPS-A scale indeed

represented them best since age 18 years up till when they were interviewed (Group I, mean age: 42.1 ± 16 years). Only 86 (7.6%) of the respondents reported that their answers represented them only for a period of that time frame (Group II, mean age: 49.3 ± 16.8 years and Group III, mean age: 50.8 ± 16.7 years), whereas 25 (2.2%) thought their answers would be always changing (Group IV, mean age: 44.4 ± 18.4 years). Group II stated that their answers represented them since age 18 years but only till a mean age of 37 (± 16 years), and Group III thought their answers represented them best starting (later than 18 years) from a mean age of 32 (± 11 years). There was no significant difference between females (88.3%) and males (92.8%) in reporting that their answers on the TEMPS-A scale represented them best since age 18 years up till when they were given the interview (Group I). 92.6% of single, 90.6% of married, 80.0% of separated/divorced and 79.5% of widowed belonged to Group I ($P=0.002$). Although the majority in each age group belonged to Group I, those older than 40 years were more likely to say that the TEMPS-A started representing them much later than 18 or were all along unstable (Table 3).

Group I scored highest on the formal scoring of the hyperthymic subscale, Group II on the depressive subscale, Group III on the anxious subscale, and those who said their answers would fluctuate all the time (Group IV) had the highest scores on the cyclothymic and irritable subscales (Table 4). When examining global subjective scoring, 94.3% of the respondents who chose “totally energetic and cheerful”, 95.6% of “easily irritated”, and 90.1% of “even-tempered”, reported that their answers on the TEMPS-A scale indeed represented them best since age 18 years up until when they were interviewed (Group I) as compared to 74.4% of those who chose “nearly always sad”, 80% of “nearly always worried” and 80% of “a lot of emotional highs and lows”.

Predictors of Group I (vs. Groups II, III and IV) controlling for age, gender, years of education, difficulty

Table 4
Respondents’ impressions on the time frame best representing their temperament and temperament scores (mean \pm S.D.)^a

Temperament subscale	Group I (18 years—now ^b)	Group II (18 years—before now)	Group III (after 18 years—now)	Group IV (always changing)	P ANOVA
Depressive	7.5 (2.8)	8.9 (3.0)	8.2 (3.1)	8.4 (2.6)	0.02
Cyclothymic	5.8 (4.2)	6.7 (4.8)	7.4 (4.6)	9.1 (4.8)	<0.001
Hyperthymic	12.8 (4.3)	11.2 (4.7)	11.1 (4.6)	11.4 (3.8)	0.003
Irritable	2.7 (3.0)	2.8 (3.1)	3.3 (3.5)	3.8 (3.5)	0.1
Anxious	6.4 (5.1)	8.4 (5.9)	8.5 (5.9)	8.0 (5.0)	0.003

^a Measured by their answers on the Lebanese–Arabic TEMPS-A.

^b Now refers to the time when they were interviewed.

in understanding the items, self-filled or not, and formal scoring on the five temperament subscales are shown in Table 5.

We had also asked the respondents who belonged to Group II, III or IV whether the changes they had in their answers to the TEMPS-A were due to illness, getting older, medication, or to “other” reasons. Of the closed-ended possibilities, “getting older” was the most frequent reason given by the respondents to explain why the TEMPS-A did not represent them best all through their adulthood, and was picked up by 35.3%, 27%, and 30.4% of Groups II, III and IV, respectively. Only one respondent gave medication as a reason. There were no other major clusters of reason answers (results available upon request). Together, illness and getting older were the major reasons of Group II respondents (58.8%, 0.9% of the total sample). The “other reasons” (family problems, economic, marriage, death of someone and other stressful life events) section carried the largest number of answers in Group III (66.67%, 3.7% of the total sample) and Group IV (65.2%, 1.32% of the total sample).

4. Discussion

4.1. Main findings

The overwhelming majority of the respondents of the LEBANON-TEMP felt that their answers to the formal

Lebanese–Arabic TEMPS-A scale did represent them throughout their adulthood (from age 18 till the time of the interview). For the small number (9.7%) who did not (Group II, III or IV), the reasons they gave for the instability of their description of their own temperament were most commonly: growing old, getting sick and stressful life events. Those who felt that their temperament description did not cover all their adult life until the time of the interview (Groups II and III, 7.6% of the total population) report this change to occur around their mid-30s, albeit with great variety. As people get older, they report more often that their answers started representing them later than age 18 years (Group III). The few respondents who felt that their answers would fluctuate all through their adulthood (Group IV) scored highest on the cyclothymic subscale, in contrast to those who felt that their answers would have been the same all their life (Group I). Besides hyperthymic temperament, younger age predicted stability.

The fact that the majority of respondents (90.3%) reported that their answers on the TEMPS-A scale represented them best since age 18 years (until the time of the interview) underscores the reliability of our data. In other words, it shows at least that the respondents followed the instructions of the TEMPS-A scale adequately and that their answers on the formal scoring reflected truly their state most of their lives, and thus were not referring only to a specific period.

Almost half of our sample (48.5%) chose as a global subjective impression of their own temperament the “even-tempered” category and 34.3% chose “totally energetic and cheerful”; both groups scored highest on the hyperthymic temperament subscale. This could be theoretically linked to the “desirability” of the items comprising the hyperthymic subscale on the TEMPS-A, or alternatively hyperthymics feel more than any other subgroup to be “stable” throughout their lifetime (Akiskal and Akiskal, 2005). Indeed, group I respondents, that is those who felt that their answers to the TEMPS-A represented them most of their lives, again scored highest on the hyperthymic subscale.

When comparing how the respondents scored on the formal subscales and what they chose as a global subjective impression of their own temperament, we find that there is consistency in how the respondents choose their temperament subjectively, and how they score on that corresponding temperament. This consistency might infer that the respondents are rather aware of which temperament they have. However, this needs to be validated perhaps by taking the opinion of “significant” others of the respondent throughout adulthood, who could be the mother, sibling, spouse, partner or friend. On the

Table 5
Factors linked to the stability of answers on the Lebanese–Arabic TEMPS-A: Group I vs. (Groups II, III and IV)^a

Variable	OR	[95% CI]	P-value
Age (years)	0.97	[0.96,0.99]	0.005
Gender			
Male=1, female=2	0.86	[0.52,1.44]	0.6
Education (years)	1.01	[0.96,1.06]	0.7
Depressive sub-score	1.06	[0.96,1.16]	0.2
Cyclothymic sub-score	0.82	[0.82,0.95]	0.01
Hyperthymic sub-score	1.01	[1.04,1.15]	0.01
Irritable sub-score	1.02	[0.92,1.13]	0.7
Anxious sub-score	0.97	[0.92,1.13]	0.3
Marital status			
Single	1.00	–	–
Married	0.94	[0.46,1.89]	0.9
Separated/divorced	0.34	[0.06,1.90]	0.2
Widowed	0.59	[0.20,1.74]	0.3
Difficulty in understanding items			
No difficulty	1.00	–	–
Some difficulty	1.01	[0.55,1.84]	1.0
So much difficulty	0.71	[0.16,3.08]	0.6
Mode of delivery			
Self-filled=1, interviewed=2	1.22	[0.72,2.08]	0.4

^a Group I: age 18 years—now; group II: age 18 years—before now; group III: later than age 18 years—now; group IV: always changing.

other hand, it would have been interesting to compare the subjective impressions of the respondents to the factor analysis of our previous publication (Karam et al., 2005).

4.2. Methodologic aspects

The Lebanese–Arabic TEMPS-A being a self-filled instrument makes it quite suitable for use in epidemiologic studies, especially since 82.1% of the sample found it not to be difficult at all to understand. In our sample, 43.1% of the respondents did not fill the TEMPS-A, but preferred it to be read. This normally would have been considered a limitation to our study; however, our findings do not point to any difference between the two modes of delivery (self-filled vs. interviewed) with more tendency of this Lebanese sample to find the TEMPS-A somewhat more difficult if it were read to them. The mode of delivery is subjected to cultural factors such as illiteracy, which occurs in 7.5% of the population (CAS, 2005); therefore, it was not surprising to have 10% of the respondents selecting to have the interview read to them. On the other hand, having the TEMPS-A at the end of the lengthy CIDI may explain why 20% of the respondents preferred that the interview be read for them. In any case, the stability of answers did not change whether the respondents completed the scale themselves or were interviewed.

4.3. Conclusion

In this large national epidemiologic study from Lebanon, the majority of respondents felt that their answers on the TEMPS-A scale (Lebanese–Arabic version) indeed represented them throughout their adulthood. The minority who did not were more likely to be older (more than 40 years), to have scored higher on the cyclothymic and lower on the hyperthymic subscales. In addition, the global subjective impressions of the Lebanese of their own temperament paralleled with the formal sub-scores on the five affective temperament subscales. Lastly, the TEMPS-A is also suitable to be delivered in interview format. The above findings are a body of evidence that supports the appropriateness of the TEMPS-A scale in epidemiologic studies.

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Appendix A. English version

Check the ONE item that describes you best overall, for most of your life:*

**Choose the ONE
answer that
applies the best**

- 1—I am nearly always sad
- 2—I am a totally energetic and cheerful person.
- 3—I have a lot of emotional highs and lows.
- 4—I am easily irritated, small things set me off.
- 5—I am nearly always worried.
- 6—I am an even-tempered person

Choose ONE option from the given options that represents your answer:**

- I didn’t find any difficulty understanding the questions————1
- I found some difficulty understanding the questions —————2
- I found great difficulty understanding the questions —————3

You have been asked through this questionnaire to choose the statements that reflect your feelings, your thoughts or behavior most of the time during your life, after you became 18 years old. Do you think these statements you chose (the ones you answered yes to):**

- 1—Describe you best, since age 18 until now (Group I)
- 2—Describe you best, during a certain period of your life, starting age 18 but only until a specific age of..... (please specify age in space) (Group II)
- 3—Describe you best, not immediately after age 18, but some time after that, starting from age..... until now (please specify age in space) (Group III)
- 4—You can’t specify, because you fluctuate all the time (Group IV)

If you have fluctuated from age 18 until now (that means if your answer to the previous question was 2, 3 or 4) what was the reason for that fluctuation?***

- 1—Illness, specify:
- 2—Aging
- 3—Taking medication(s), specify:
- 4—Other, specify:

*Part of the original TEMPS-A

**Added to the original TEMPS-A by IDRAAC

Appendix B. A section of the Lebanese–Arabic TEMPS- A

اختر صفة واحدة من الصفات المذكورة أدناه والتي تصفك بالشكل الأفضل في معظم حياتك بعد أن بلغت عمر الـ 18 سنة (ضع دائرة حول تلك الصفة)، يمكن أن تنطبق عليك أكثر من صفة، تذكر أننا نريد وصف واحد فقط، هو الذي يصفك بالشكل الأفضل، معظم حياتك بعد أن بلغت عمر الـ 18 سنة.*

إنتبه !
اختر صفة واحدة فقط

- 1- أنا تقريباً، دائماً حزين.
- 2- أنا مليء بالنشاط والحيوية والمرح.
- 3- لدي كثيراً من التقلبات الانفعالية (صعوداً وهبوطاً).
- 4- أنا سريع الغضب، وأشياء صغيرة تجعلني أثور.
- 5- أنا تقريباً، دائماً قلق.
- 6- أنا انسان ذو مزاج معتدل.

اختر احتمالاً واحداً فقط من الاحتمالات المذكورة التي تمثل جوابك**

- 1 لم أجد أي صعوبة في فهم الأسئلة
- 2 وجدت بعض الصعوبة في فهم الأسئلة
- 3 وجدت صعوبة كبيرة في فهم الأسئلة

لقد سُئلت في هذه الإستمارة أن تختار التصاريح التي تعكس شعورك، تفكيرك أو تصرفات معظم الوقت من حياتك بعد أن بلغت عمر الـ 18 سنة. هل تعتقد أن التصاريح التي اخترتها (أي التي أحببت عليها بـ صح):**

- 1- تصفك بالشكل الأفضل بين عمر الـ 18 حتى الآن. (Group I)
 - 2- تصفك بالشكل الأفضل خلال فترة زمنية من حياتك، بدءاً من عمر الـ 18 ولكن ليس حتى الآن، فقد توقفت هذه الفترة عند عمر (الرجاء حدد العمر في الفراغ) (Group II)
 - 3- تصفك بالشكل الأفضل ليس مباشرة بعد سن الـ 18 ولكن بعد فترة زمنية من بلوغك سن الـ 18 وذلك من عمر حتى الآن. (الرجاء حدد العمر في الفراغ) (Group III)
 - 4- لا تستطيع أن تحدد إذ انك تتقلب كل الأوقات. (Group IV)
- إذا كنت قد تقلبت بين سن الـ 18 حتى الآن (أي أن جوابك في السؤال السابق 2، 3، أو 4). ما كان سبب هذا التقلب؟**
- 1- مرض، حدد: _____
 - 2- التقدم في السن
 - 3- أدوية، حدد: _____
 - 4- غيره، حدد: _____

* Part of the original TEMPS-A

** Added to the original TEMPS-A by IDRAAC

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