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Research Article

The Tuckman Procrastination Scale: Psychometric Features among Buenos Aires Undergraduates

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Abstract

Procrastination is a deleterious and increasingly pervasive phenomenon within the higher-academic domain, and the progressive refinement of its measurement tools proves vital to shed light and undertake this behavior. Thus, the present study examines renewed psychometric quality features of the Tuckman Procrastination Scale within an Argentinian sample. The sample was composed of 923 undergraduates from Buenos Aires City and its environs (80.7% female; 18.7% male; 0.5% non-binary; *M*age = 26.60; *SD*age = 8.25). The Cordoban-Argentinian adaptation of the Tuckman Procrastination Scale was employed. Content validity analysis of the scale's items was carried out upon consideration of expert judgments. Face validity of the instrument was analyzed via a pilot study with a subsample of undergraduates. Subsequently, a confirmatory factor analysis of the Tuckman Procrastination Scale structure was conducted, and the internal consistency of the resulting factor was examined. Finally, correlations with the Academic Motivation Scale were analyzed to provide evidence of convergent validity. Results of the Confirmatory Factor Analysis supported an adequate fit of the Tuckman Procrastination Scale's structure in its Cordoban-version 15 items, while internal consistency was acceptable-to-excellent. Finally, convergent validity evidence mostly exhibited positive associations between Procrastination and both Amotivation and less self-determined motivational subscales of the Academic Motivation Scale, while negative associations were observed with regards to Intrinsic Motivation subscales.

Keyword: procrastination; Tuckman Procrastination Scale; validity; internal consistency; undergraduates.

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Procrastination has been defined as the tendency to voluntarily put off tasks, despite knowing the delay worsens one's performance, stemming from self-regulation failure (Steel 2007; Steel, 2010; Tuckman, 1991).

Procrastination is a highly pervasive problem within the academic domain, where reports point towards at least half of all students incurring in this behavior (Ferrari et al., 2009; Solomon & Rothblum, 1984). Other studies argue a progressive increase in its prevalence over the years (Steel, 2007), which might steepen in recent times due to increasing information-and-communication-technology usage among students (Reinecke & Hofmann, 2016). Procrastination has been linked in turn with a worsened academic performance and psychological distress among undergraduates (Kim & Seo, 2015; Stöber & Joormann, 2001; Tice & Baumeister 1997; Van Eerde, 2003). In both its omnipresence and its link with adverse outcomes within the academic milieu, procrastinatory tendencies constitute a behavioral pattern of which its amelioration proves a necessary endeavor (Ellis & Knaus, 1977).

Procrastination measurement

The vital input of the measurement of Procrastination towards aiding psychological research on this widespread and deleterious behavior has been asserted within the literature (Fernie et al., 2016). Moreover, reports posit that increasingly comprehensive and valid frameworks of procrastinatory behavior are necessary (Van Eerde, 2003; Zhang et al., 2019), where the

existence of ongoing debates gravitate towards how to further refine empirical measures of Procrastination (Steel, 2010).

Currently, self-reports are the most employed and reliable procrastination measures (Zhang et al., 2019); yet, it has been suggested that little research has been undergone in the way of producing satisfactorily valid academic procrastination scales (McCloskey, 2011).

The most commonly known and used scales have been Lay's General Procrastination Scale (GPS; Lay, 1986), Solomon and Rothblum's (1984) PASS scale, and the Tuckman Procrastination Scale (TPS; Tuckman, 1991). Of these former scales, both the GPS and the PASS were designed with either dated definitions of Procrastination in mind or with scales that did not exclusively assess procrastinatory behaviors (McCloskey, 2011). Thus, the TPS stands out as one of the most utilized procrastination scales within the academic domain whose designing definition of the construct converges with recent literature delineations (Kim & Seo, 2015; Sirois & Pychyl, 2013; Steel, 2010).

The Tuckman Procrastination Scale (TPS)

Tuckman (1991) devised and designed the TPS as a measure of the "tendency to delay or put off doing things" (Tuckman, 1991, p.475) due to a failure of self-regulation. The scale has subsequently been amply used as a measure of Procrastination due to its compatibility with the construct's most recent convergence of definitions of procrastinatory tendencies as deriving from a self-regulatory deficit (Grunschel et al., 2013), as well as its ease-of-use and interpretation (Uzun-Özer et al., 2013). Of particular note, it has been addressed as measuring either general or typical Procrastination (Pinxten et al., 2019; Stöber & Joorman, 2001; Zhang et al., 2019) and procrastination tendencies circumscribed to the academic domain (Ferrari et al., 1995; Grunschel et al., 2013; Kim & Seo, 2015; Uzun-Özer et al., 2013).

Regarding the scale's construct validity, studies reported 1-factor models that exhibited adequate fit. However, in many instances, the number of items retained within the Procrastination factor decreased, out of 16 original items (Tuckman, 1991) to 14 (Serhatoglu, 2018; Uzun-Özer et al., 2013) or even 9 (Pinxten et al., 2019; Kim et al., 2020). Notably, the number of studies that examined construct validity of the scale lacks in comparison to the instrument's vast history of use (Kim & Seo, 2015; McCloskey, 2011). This marked contrast between the scale's employment and the number of psychometric quality assessment studies implies that a more comprehensive work on the assessment of the instrument's psychometric features is needed.

From a local perspective, the TPS has been previously adapted to be used with Argentinian population. Furlan et al. (2010) began with a 35-item version of the TPS. The authors translated the instrument into Spanish and carried out a pilot study and an exploratory factor analysis with Cordoban Psychology undergraduates – a city of the central part of Argentina which gathers a significant proportion of the Argentinian population and houses one of the country's most prominent universities. The resulting scale was comprised of 15 items. Its one-dimensional structure exhibited a good fit in a second study, which employed a sample of multiple career undergraduates, and displayed adequate internal reliability values (Furlan et al., 2012).

Nonetheless, it should be noted that the studies mentioned above exclusively employed a student sample of Argentina's Córdoba city. To warrant a more in-depth assessment of the scale properties, studies within populations from varying regions of countries would do best by carrying out multiple psychometric property assessment studies employing increasingly diverse samples (Cohen & Swerdlik, 2009). Additionally, the original adaptation sample from which both the pilot-testing and item-selection procedures were carried out was exclusively composed of Psychology students (Furlan et al., 2010). Thus, further validation studies would aid by exploring internal structure evidence with a broader sample of undergraduates from additional country areas. The conjunction of these facts warrants additional analyses which delve into the scale's psychometric properties.

Finally, the TPS is not without its criticisms – caveats have pointed towards the need for a more solid construct validation (McCloskey, 2011), as opposed to the study where the 1-factor structure was verified – originating from a factorial analysis of a sample of 50 students (Tuckman, 1991). All in all, considering its vast usage history, the TPS remains an ideal instrument for procrastination assessment within the academic domain – provided continual psychometric quality assessment is carried out.

Moreover, possessing more extensive and increasingly diverse samples such as from different universities and diverse areas of countries would undoubtedly strengthen previous national findings and provide further evidence of the TPS's validity and reliability (Uzun-Özer et al., 2013).

Procrastination and motivation

Consistent with its definition, reports have long posited that Procrastination can be considered as arising from a motivational deficit or failure (Haghbin et al., 2012; Klassen et al., 2008; Klingsieck et al., 2013; Senecal et al., 1995; Yurtseven & Dogan, 2019). These

findings have led to an extensive line of research embedded in identifying and analyzing individual differences linked to the tendency to procrastinate (Klingsieck et al., 2013), of which motivation has been proven to be a key factor (Rakes & Dunn, 2010).

Self-determination theory differentiates between intrinsic and extrinsic motivational types within a self-regulation framework. It posits behaviors varying in a continuum of self-governance, from least to most autonomous (Deci & Ryan, 1985, 1991). Autonomous individuals –i.e., self-regulated– are more likely to display greater initiative and perform tasks more consistently than less autonomous ones (Deci & Ryan, 1987; Vallerand, 1992). In this sense, amotivation and extrinsic motivational forms –non-self-determined and least self-determined forms of motivation, respectively– have been mostly associated with higher levels of Procrastination; conversely, intrinsic motivational forms –i.e., self-determined subtypes– have been primarily linked with lower procrastinatory tendencies (Bosato, 2001; Brownlow & Reasinger, 2000; Burnam et al., 2014; Cavusoglu & Karatas, 2015; Cerino, 2014; Katz et al., 2014; Lee, 2005; Milgram et al., 1988; Senecal et al., 1995). The long line of research linking self-determination types with Procrastination proves the former to be ideal for providing convergent validity evidence regarding the TPS.

Purpose of the study

The present study sought to analyze psychometric properties of the Cordoban-Argentinian version of the TPS (Furlan et al., 2010; Furlan et al., 2012) in the form of content, face, and construct validity, as well as internal consistency within undergraduate students from Buenos Aires City and its environs – Argentina. Additionally, associations between the TPS and the Academic Motivation Scale (Stover et al., 2012; Vallerand et al., 1992) were analyzed to provide evidence of convergent validity.

Method

Design

An instrumental and correlational study design was implemented.

Participants

Participants were recruited through convenience sampling. The sample was divided in twofold: a first subset was composed of 5 undergraduates majoring in diverse subjects from public universities of Buenos Aires City and its environs in Argentina (3 women; 2 men; M_{age} = 25.20; SD_{age} = 2.28). The second subset was comprised of 923 undergraduates of the same academic background as the first sample (80.7% female; 18.7% male; 0.5% non-

binary; M_{age} = 26.60; SD_{age} = 8.25). The first subset was selected for a pilot study, whereas the second was used to carry out internal structure, internal consistency, and convergent validity analyses.

Measures

Sociodemographic Survey. Participants indicated their age, gender, and academic background information.

Tuckman Procrastination Scale (TPS). The TPS assesses Procrastination within the academic domain, according to the previously mentioned definition (Tuckman, 1991). The Cordoban-Argentinian adaptation of the scale was employed (Furlan et al., 2010; Furlan et al., 2012).

Academic Motivation Scale (AMS). The Argentinian version of the Academic Motivation Scale was employed (Stover et al., 2012; Vallerand et al., 1992) to examine convergent validity evidence with the TPS. This scale assesses seven academic-motivational subtypes per Self-Determination Theory. From least to most self-determined: (a) *Amotivation* –A; unregulated behavior or absence of motivation, (b) *Extrinsic Motivation – External* –EM-Ext; behaviors carried out in avoidance of punishment or for the obtainment of external rewards, (c) *Extrinsic Motivation – Introjected* –EM-Int; behaviors carried out in avoidance of anxiety or guilt for not executing them or for improvement of the individual's self-esteem, (d) *Extrinsic Motivation – Identified* –EM-Id; extrinsic yet abstract motives guide the selection of behaviors, (e) *Intrinsic Motivation towards Knowledge* –IM-Know; the pleasure of learning guides the execution of tasks, (f) *Intrinsic Motivation towards Achievement* –IM-Achieve; refers to emergent satisfaction upon the overcoming of one's limits, and (g) *Intrinsic Motivation towards Stimulating Experiences* –IM-SE; activities are performed for aesthetical, intellectual or sensorial sensations. The scale has shown adequate reliability and evidence of both internal and external validity regarding local university students (Stover et al., 2012; Stover et al., 2015).

Procedure

Data collection was carried out through an online survey. Participants were recruited via social media student groups, where a link to the survey was provided. Undergraduates gave informed consent to participate and were simultaneously briefed regarding the confidentiality of their responses as well as the possibility to desist from participating at any point in the procedure. Subjects received no form of compensation for their participation in the study.

Content Validity

Five experts in Educational Psychology and Psychometrics gave their judgments on the pertinence of the TPS items regarding the assessed construct. Expert judgment was calculated through Aiken indices.

Face Validity

5 undergraduates from Buenos Aires City and its environs underwent a pilot study of the TPS in its Argentinian-Cordoban version. Each offered their views on the comprehensibility, clarity and familiarity with the wording of the scale's items, the verbalized task and the response format.

Internal Structure and Internal Consistency of the TPS

Considering the ordinal quality of the TPS items' Likert response format, a Confirmatory Factor Analysis was carried out implementing a Diagonally-Weighted Least Squares (DWLS) estimator deriving from a polychoric correlation matrix (Muthen & Kaplan, 1985; Kline, 2011). The model was specified as a single latent factor labeled *Procrastination* explaining the total 15 items of the scale, as carried out on previous studies within the Cordoban-Argentinian context (Furlan et al., 2012). Fit indices considered were Satorra-Bentler-scaled χ^2, CFI, TLI, RMSEA and SRMR. Moreover, the factor's internal consistency was assessed by estimation of Cronbach's Alpha and Ordinal Alpha coefficients (Gadermann et al., 2012).

Convergent Validity

Normality assumption of Procrastination-total and Academic Motivation-subscale variables was assessed, of which only for the Amotivation subscale of the AMS this was not supported. Thus, Pearson's *r* correlation coefficients were calculated for associations of all variables with the exception of Amotivation, of which Spearman's *rho* was estimated. Correlational effect sizes were interpreted regarding values suggested by recent meta-analytical literature ($r > .10$ *small*, $r > .20$ *medium*, $r > .30$ *large*; Gignac & Szodorai, 2016), rather than utilizing typical cut-off criteria (e.g., Cohen, 1992), on account of recommendations made by recent reports (Correll et al. 2020; Funder & Ozer, 2019).

Statistical analyses were performed with *SPSS* 25.0 software package, as well as *RStudio* *lavaan* (Rosseel, 2012) and *psych* (Revelle, 2017) packages.

Results

Content Analysis

Regarding content analysis, the scales' 15 items exhibited Aiken coefficients equal to or higher than 0.80, which ensured the scale's content validity within the educational context.

Pilot Study

Following students' suggestions, changes were made to the task and several item wordings, as well as semantic anchorage of the whole five points of the Likert scale was provided to facilitate the response experience.

This eliminated minor confounding local-language expressions, increasingly smoothing the response flow of the instrument. Modifications are summarized in tables 1 and 2 (Appendix).

Internal Structure Analyses

A Confirmatory Factor Analysis (CFA) was performed to assess the construct validity of the procrastination model outlined in the Method section. Examination of goodness-of-fit indices revealed a good overall fit of the one-dimensional structure. Fit indices –CFI, TLI, RMSEA and SRMR– exhibited adequate-to-optimal values (CFI > .95, TLI > .95, RMSEA < .06, SRMR < .08; Marsh et al., 2004). It should be noted that, despite encountering a statistically significant chi-square value, this can be attributed to the usage of a large sample and thus not lead in its sole examination to model rejection (Tanaka, 1987). Regarding path coefficients pertaining to the scale's items, all were significant at $p < .001$ and above acceptable parameters (>.30 Whitley & Kite, 2013). However, only one item surpassed optimal estimation levels (>.70, $R^2 > .50$; Kline, 2011) with other six items closely in approximation. Fit indices, estimated path coefficients, and overall CFA structure are summarized in Table 1 and Figure 1.

Table 1.

Tuckman Procrastination Scale Confirmatory Analysis. Fit Indices

	Fit Indices					
	S-B χ2	df	CFI	TLI	RMSEA [CI]	SRMR
Procrastination (DWLS Estimation)	574.025***	150	.957	.970	.055 [.051-.060]*	.064

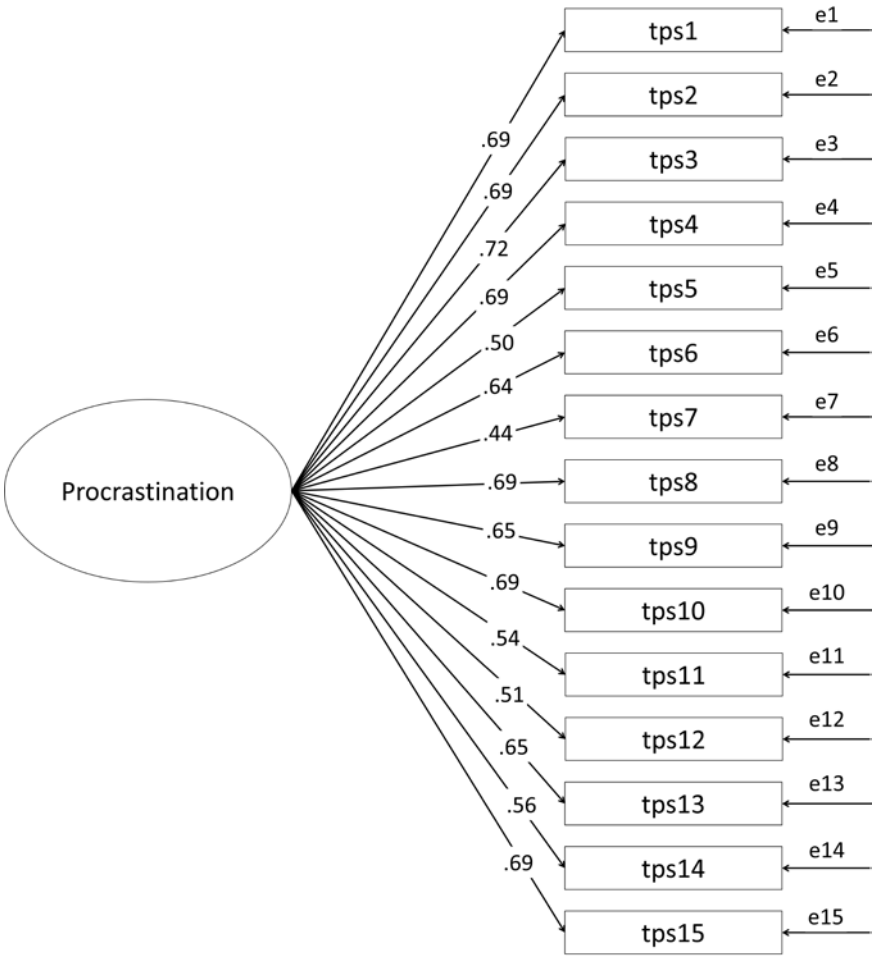

Figure 1. *Tuckman Procrastination Scale - CFA Path Diagram. Note: all estimated standardized paths were significant at p < .001*

Internal Consistency Analyses

Both Cronbach and Ordinal Alpha's were estimated for the resultant Procrastination factor of the TPS to assess its internal reliability. Cronbach's Alpha was α = .885, whereas the Ordinal Alpha value was of .905. Moreover, information revealed no significant increase as to both reliability indices should any items be dropped.

Convergent Validity Analyses

Pearson's *r* coefficients were computed to assess associations between the TPS and the AMS subscales excluding Amotivation; Spearman's *rho* was computed for the latter subscale. Statistically significant and small-to-medium size correlations were found between the TPS and the AMS, with the exception of EM-Id and EM-Ext subscales. Correlation results are summarized in Table 2.

Table 2.

Procrastination and Academic Motivation Scale's subscales. Correlation Analyses

	IM-SE	IM-Achieve	IM-Know	EM-Id	EM-Int	EM-Ext	A
Procrastination	-.24***	-.19***	-.16***	-.04	.10**	.00	.28***[a]

[a] *Spearman's rho*; ** *p* < *.01*; *** *p* < *.001*

Discussion

The present study aimed to offer new psychometric property analyses regarding the Argentinian version of the TPS for university-level students, insofar as past validation studies were circumscribed to a specific area of the country and thus reflected a need to complement past work by employing a renewed sample of students of differing environs. Consequently, this study provides renewed evidence as to the scale's content, face, construct and convergent validity evidence, as well as an assessment of its internal reliability. From an applied perspective, psychometric quality and technical properties of the scale within a broader national area are provided. From an instrumental standpoint, evidence of the dimensional structure of the construct is conveyed.

Decisions to maintain the TPS's Cordoban-version 15 items arisen from expert judgments and the heeding of student suggestions ensured both the correspondence of the scale's content regarding the measurement of the Procrastination construct in its original definition (Tuckman, 1991) and a smoothed response experience tailored to the Buenos-Aires-city-and-environs linguistic particularities. Internal structure analysis of the TPS confirmed an adequate fit of the theoretically underlying model, coinciding with previous literature findings regarding construct validity analyses of the scale (Furlan et al., 2012; Serhatoglu, 2018; Uzun-Özer et al., 2013). Regarding item-level estimated parameters, these satisfied minimum requirements of acceptability (Whitley & Kite, 2013) and were in turn similar to those reported in the Cordoban-Argentinian construct validity assessment study (Furlan et al., 2012). However, it should be noted that only item number 3 surpassed optimal parameter criteria (Kline, 2011), with items number 1, 2, 4, 8, 10 and 15 closely approximating this. The aggregation of these facts implies that, in terms of the scale's internal structure, evidence points towards the satisfactory feasibility of its usage to assess procrastinatory tendencies amidst undergraduates. However, refinement and depuration of its items may be overdue and welcomed as an addition to the Procrastination measurement literature.

The indicators above point towards evidence of an adequate representation of the theoretical procrastination structure on an empirical level within the Buenos-Aires-City-and-environs university-level context. These elements provide further assurance as to the viability of assessing the Procrastination construct on the Argentinian higher-education domain. Considering that the present study encompassed a large sample of students from within the largest city in Argentina and further environs, this fact, in conjunction with the similarity in results with regards to the past Argentinian report (Furlan et al., 2012), offer evidence in favor of the representativeness and applicability of the TPS within the country. However, notwithstanding the positive outlook that the present results may offer, future studies should pay close attention to the instrument's item-level loadings to ensure continued robust evidence of its internal validity.

Regarding current convergent validity results, the findings of negative associations between procrastination and intrinsic motivation subtypes as well as positive associations regarding procrastination and extrinsic and amotivation subscales follow literature findings in an overall manner (Bosato, 2001; Brownlow & Reasinger, 2000; Burnam et al., 2014; Cavusoglu & Karatas, 2015; Katz et al., 2014; Lee, 2005; Milgram et al., 2003; Seo, 2013; Yurtseven & Dogan, 2019). It would thus appear that students who possess either an absence of motivation or less self-determined motivational profiles also exhibit higher procrastinatory tendencies, while for more self-regulated undergraduates Procrastination levels appear at a low.

Notably, exceptions were the lack of statistically significant associations between the TPS and both EM-Id and EM-Ext AMS subscales. Associations between the EM-Id AMS subscale and Procrastination proved to be a conflicted finding in past studies (Cerino, 2014; Chang, 2014; Rebetez et al., 2015; Senecal et al., 1995), while in turn the same occurred regarding the EM-Ext AMS subscale (Cerino, 2014; Rebetez et al., 2015). This information might explain the absence of significant correlations hereby reported. Thus, while these factors warrant additional attention in the future, they may not be considered a complete exception within the existing literature. In addition to this, the absence of significant associations may also be attributed to the profusion of dimensions of the local version of the AMS: while some studies employed the latter scale considering 3 or 4 motivational dimensions (Cavusoglu & Karatas, 2015; Orpen, 1998; Senecal et al., 1995), the Argentinian version exhibits a whopping seven dimensions for which a total of 27 items are distributed along (Stover et al., 2012). The latter fact might have been the result of an attempt to over-represent the

underlying motivational theory, which may have caused motivational factors to overlap and thus not correlate with the TPS within the present study.

In this sense, correlational analyses point towards adequate convergent validity evidence of the TPS scale regarding motivation within the academic context, with coefficients bearing similarity with those reported on extant literature studies. Nonetheless, further evidence of the association between the TPS and a more diverse array of constructs will be needed to ascertain the present findings.

Practical implications of the findings presently reported are the possibility of performing an adequate assessment of procrastinatory tendencies of individuals currently inserted within the higher-academic domain. Furthermore, considering the university population's educational capacities, the furthering of validity and reliability evidence hereby presented allows for the consideration of a *self-assessment* of Procrastination. Thus, a Procrastination assessment by the students themselves would allow undergraduates to gain conscience of their dilatory tendencies and eventually facilitate them to modify them if these prove not to be adaptive with regards to their performance. Secondly, an effective Procrastination diagnosis could lead to increasingly personalized and refined interventions, either individual or grouped by academic seniority level. Moreover, an increasingly apt assessment may allow for a finer detection of this problematic behavioral pattern; thus, it ultimately warrants the consideration of promoting more functional educational approaches among undergraduates, which could reduce the occurrence of procrastinatory behavior.

Limitations

The limitations of the study include the fact that the sample was not gender-balanced, which may have altered the interpretation of results. Future studies should consider conducting additional internal and external validity analyses with more balanced samples. Pertaining to this, future studies might also benefit from performing factorial-invariance analyses of the TPS with regards to both gender and academic seniority.

Additionally, analyses and respective findings stemmed from a correlational design. Future work might do good to implement longitudinal designs; this modification may broaden the generalization of results.

Finally, a convenience sampling method and exclusively self-report instruments were used within the present study, facts which warrant particular attention upon interpretation of results.

Recommendations for Future Research

Admittedly, not all variants of procrastinatory behavior have been found to hold negative connotations within the literature, as several reports within past years have found Procrastination to be multidimensional in nature (Hensley, 2013, 2016; McCloskey, 2011). Thus, future studies which incorporate aspects of procrastinatory tendencies not defined in a traditional sense, such as Active Procrastination (Choi & Moran, 2009; Chu & Choi, 2005), may shed some light on multiple facets of the construct and its measurement (Michinov et al., 2011).

Moreover, future studies could consider analyzing and proposing a briefer version of the TPS. This suggestion turns robust upon examination of recent literature employments of the scale, where a combination between high internal reliability values and progressive item reduction within studies has resulted in successful implementations of increasingly shortened versions of the TPS (Kim et al., 2020; Meier et al., 2016; Pinxten et al., 2019; Schnauber-Stockmann et al., 2018; Uzun-Özer et al., 2013). This in turn reflects recent literature ventures regarding other Procrastination scales (Klingsieck & Fries, 2012; McCloskey, 2011; Sirois et al., 2019; Yockey, 2016). In light of results regarding the internal structure analyses conducted within the frame of this study, consideration of reduction of the TPS items with particular attention upon items number 1, 2, 4, 8, 10 and 15 may prove an auspicious endeavor.

Another promising avenue of research is Procrastination within online-learning environments. Online-learning research is a growing field (Michinov et al., 2011), where efforts to analyze procrastinatory tendencies within this framework would turn fruitful if not imperative sooner rather than later, considering the recent outlook of education marked by quarantine and/or social isolation, in addition to an ever-increasing use of virtual pedagogical resources (Joosten & Cusatis, 2020).

Conclusion

In conclusion, the present study complements the existing Procrastination literature by providing additional and robust psychometric quality evidence regarding the local applicability of one of the construct's most utilized scales within the higher-level academic milieu. In light of the pervasiveness of procrastinatory tendencies among students within a vast array of nations and cultures, an increasingly refined assessment of the construct proves vital to undertake and shed light upon this phenomenon. The present article speaks to this by

offering ampler validity and reliability evidence of the TPS in the Argentinian university-level context.

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Competing Interests

The authors have declared that no competing interests exist.

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Appendix

Tuckman Procrastination Scale – task wording and response format across studies

	Tuckman, 1991 - USA	**Furlan, 2010; 2012 - Argentina**	**Present Study - Argentina**
Task Wording	Not Available	*Durante su carrera un estudiante debe cumplir diferentes actividades de aprendizaje, como leer textos, resolver ejercicios, prepararse para rendir, redactar y presentar trabajos, etc.; y las siguientes frases describen algunas cosas que les pasan a los estudiantes cuando deben realizarlas. Indica con qué frecuencia esto te ocurre.*	*Durante su carrera, un estudiante* ***usualmente*** *debe cumplir* ***con distintas actividades*** *como,* ***por ejemplo****, leer textos, resolver ejercicios, prepararse para rendir,* ***hacer*** *y presentar trabajos prácticos,* ***y demás****.* ***Las*** *siguientes frases describen algunas* ***situaciones*** *que les pasan a los estudiantes cuando* ***tienen que hacer estas actividades****.* ***No hay respuestas correctas o incorrectas. Intentá responder lo más honestamente que puedas en relación con tu experiencia.*** *Indicá con qué frecuencia* ***estas cosas te pasan****.*
Likert Scale Wording	4-point: *that's me for sure*; *that's my tendency*; *that's not my tendency*; *that's not me for sure*.	5-point: *1="Nunca me ocurre"* to *5="Siempre me ocurre".*	5-point: *Nunca* ***me pasa*****; Casi** ***nunca me pasa*****;** ***A veces me pasa; Casi siempre me pasa*****;** *Siempre* ***me pasa.***

Tuckman Procrastination Scale – item wording across studies

Item No.	Tuckman, 1991 - USA	Furlan et al., 2012 - Argentina	Present Study - Argentina
1	I needlessly delay finishing jobs, even when they're important.	Demoro innecesariamente en terminar trabajos, incluso cuando son importantes.	Demoro innecesariamente en terminar trabajos, incluso cuando son importantes.
2	I postpone starting in on things I don't like to do.	Pospongo el comenzar con cosas que no me gusta hacer.	Pospongo el **comienzo de** cosas que no me gusta hacer.
3	When I have a deadline, I wait till the last minute.	Cuando tengo una fecha límite, espero hasta el último minuto.	Cuando tengo una fecha límite, espero hasta el último minuto.
4	I keep putting off improving my work habits.	Sigo posponiendo el mejorar mis hábitos de trabajo.	**Pospongo** el mejorar mis hábitos de trabajo o estudio.
5	I get right to work, even on life's unpleasant chores.	Empiezo a trabajar de inmediato, incluso en actividades que me resultan displacenteras.	Empiezo a trabajar de inmediato, incluso en actividades que me resultan displacenteras.
6	I manage to find an excuse for not doing something.	Me las arreglo para encontrar excusas para no hacer algunas cosas.	Me las arreglo para encontrar excusas para no hacer algunas cosas.
7	I put the necessary time into even boring tasks, like studying.	Destino el tiempo necesario a las actividades aunque me resulten aburridas.	Dedico el tiempo necesario a las actividades aunque me resulten aburridas.
8	I'm a time waster now but I can't seem to do anything about it.	Derrocho mucho tiempo y me parece que no puedo hacer nada al respecto.	Derrocho mucho tiempo y me parece que no puedo hacer nada al respecto.
9	When something's not worth the trouble, I stop.	Cuando algo me resulta muy difícil de abordar, pienso en postergarlo.	Cuando algo me resulta muy difícil de abordar, pienso en postergarlo.
10	I promise myself I'll do something and then drag my feet.	Me propongo que haré algo y luego no logro comenzarlo o terminarlo.	Me propongo que haré algo y luego no logro **empezarlo** o terminarlo.
11	Whenever I make a plan of action, I follow it.	Siempre que hago un plan de acción, lo sigo.	Cuando hago un plan de **trabajo o de estudio**, lo sigo.
12	I wish I could find an easy way to get myself moving.	Desearía encontrar una forma fácil de ponerme en movimiento.	Desearía encontrar una forma fácil de ponerme en movimiento.
13	Even though I hate myself if I don't get started, it doesn't get me going.	Aunque me enoje conmigo cuando no hago las cosas, no logro motivarme.	Aunque me enoje conmigo **mismo/a** cuando no hago las cosas **de la facultad**, **me cuesta** motivarme.
14	I always finish important jobs with time to spare.	Siempre termino las actividades importantes con tiempo de sobra.	**Termino** las actividades importantes con tiempo de sobra.
15	I get stuck in neutral even though I know how important it is to get started.	Aunque sé que es importante comenzar con una actividad, me cuesta arrancar.	Aunque sé que es importante comenzar con una actividad, me cuesta arrancar.

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