Abstract
This paper will examine the link between language ideologies and language norms within the framework of CMC written production (SMS, emails, social networks, etc.). We will look into metalinguistic data collected in the Thumbs4Science project and classify the discourse arguments into seven different ideology types related to culture, society, relationships with others and self-representation.

Keywords: language ideologies, CMC, norms, writing systems, sociolinguistics.

Introduction
This paper will examine the link between language ideologies and language norms within the framework of CMC written production (SMS, emails, social networks, etc.). It is commonly recognised today that studies of “subjective attitudes towards language […] are important, for example, in the study of linguistic change” (Trudgill, 1995: 10), and the interest is even emphasised with CMC practices, as users’ linguistic code seems substantially altered (reduction, acronyms, use of numbers, etc.). We will look into metalinguistic data collected in the Thumbs4Science French-speaking project. The study, launched in 2016, used an online form to collect speakers’ free speech “errors”, which were made in an environment favourable to linguistic variations that are more likely to be conscious plays on words or other reductions.

Language “is an object in relation to which speakers position themselves” (Petitjean, 2009), thus elaborating an “image” of this language and its speakers. Since the emergence of new communication media, and particularly throughout the last 10 years, we have heard many debates on the evolution of spelling, the arrival of “SMS language” and the “deterioration of language”. As previously demonstrated (Maskens et al., 2016), these debates emanate more from the speakers’ preconceived ideas than from an analysis of the reality of the field. Indeed,
although studies show a marked decline in spelling levels over time (Thélot, 1996), they also demonstrate a better understanding of texts and a better ability to use language as a communication tool. These debates contribute to the very old myth of the “orthographic crisis”, which has been intensified, in particular, by the democratisation of teaching and the arrival of technologies. We find numerous contradictory research results that either prove that CMC practice has a positive influence on literacy skills (Kemp, 2010; Wood et al., 2011; Cougnon et al., 2016), or demonstrate that the practice of CMC has a negative impact on normative linguistic achievements (De Jonge & Kemp, 2012; Rosen et al., 2010). Many authors have shown that the actual phenomenon resembles more a “social struggle between those who master [spelling] and those who demand a practical tool” (Mout, 2013; Legrand, 1972).

In the testimonies we collected, totalling 7,000 words, we will attempt to identify the “propositional systems in which the representations are described by a coherent set of discrete symbols - formal utterances” (Rumelhart & Norman, 1983). These are representations, ideologies about the speaker’s own written production and the production of others. Seven different types of arguments emerge from this analysis, leading to a more general discussion about the relationship to culture, morality or aesthetics. They also highlight the tension that exists between the homogenising and heterogeneous movements of language (Canut, 1998).

1. Study Environment: *Thumbs4Science*

Since 2016, we have been gathering discourses on the variation of written standards in the framework of the *Thumbs4Science* project, an initiative of UCLouvain (French-speaking part of Belgium). The first phase of the project aimed at collecting three different types of data: sociolinguistic profiles, psycho-emotional profiles and textual productions from social networks and electronic messages. By the end of a 6-month campaign, we had already collected 445 sociolinguistic French-speaking profiles, 600 psycho-emotional profiles and a corpus of 23 million words and 35,000 wall publications from 11,000 speakers. The first corpus alone – the 445 sociolinguistic profiles – will be the subject of this study. Figure 1 presents the main sociodemographic distributions for these profiles.

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6 This research is enabled by an FNRS Postdoctoral Researcher grant.
As can be seen from the outset, the middle and upper classes are over-represented in our sample. Further surveys would therefore be necessary in order to consolidate the results that will be presented and verify whether they apply to all social strata.

The questionnaire, which enabled the collection of information about speakers’ sociolinguistic representations, is composed of three distinct parts:

1. the first part investigates socio-demographic information (sex, age, sexual orientation, institutionalised cultural capital or level of education, etc.);
2. the second part concerns social practices on social networking sites (frequency of use, harassment, popularity phenomena, etc.);
3. the final part is related to culture (objectified and embodied cultural capital: number of books owned, reading habits, etc.) and language (relation to the norm and its variations). It is this part that enabled the collection of information about sociolinguistic representations.

In this third part, we focused on representations and ideologies about spelling norms in the form of four questions (three closed-ended, mandatory questions and one open-ended, optional question):

- “How do you usually write an electronic message?”. Double entry table. X = Possible answers: SMS language, standard spelling, it depends. Y = Communication situations: to your parents, your brothers and sisters, your friends, your teacher/boss.

- “Do you see the difference between misspelling and plays on words with SMS-type language (e.g. abbreviations, changing letters to numbers, etc.)?”. Possible answers: Yes, No, Unsure.

- “Are you annoyed by spelling mistakes on social networks or in emails?”. Possible answers: Yes, No, Unsure.

7. The initial formulation in French was: Êtes-vous énervé(e) par les fautes d’orthographe sur les réseaux sociaux ou dans les messages électroniques?
In this paper, we will focus on the last point. However, we will start by examining all four points in more depth, with a quantitative approach that offers a background to the situation.

2. Numbers and Figures on Language Practices

The first question deals with how respondents write an electronic message to different recipients. Figure 2 highlights two very clear trends: (1) Respondents say they do not write in the same way in all everyday situations: it depends strongly on their interlocutor. (2) Standard spelling seems to remain the norm in all interactions; “SMS language” is mainly used among friends and is prohibited in vertical interactions, especially the most formal ones.

Regarding the second question, the vast majority of respondents (84%) affirm that they distinguish misspelling from plays on words. This preliminary question enables a better comprehension of the following question, as it ensures, in 84% of cases, that the respondents’ annoyance originates from spelling errors and not from deliberate nonconformist spellings or plays on words. For the question “Are you annoyed by spelling mistakes on social networks or in emails?”, Tables 1 and 2 show the distribution for the global results and, in particular, the age variable.

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8. The initial formulation in French was: Expliquez pourquoi les fautes d’orthographe sur les réseaux sociaux ou les messages électroniques vous énervent.

9. It should be noted that we did not want to specifically emphasise the questionnaire or our study on this aspect of the question. If we have chosen to polarise here on the answers to the open-ended question, it is because the negative judgments appeared unexpectedly and, as a result, probably reveal important sociolinguistic logics.
Table 1. Global results for the question “Are you annoyed by spelling mistakes on social networks or in emails?”

<table>
<thead>
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<th>Global results</th>
<th>Unsure</th>
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<tr>
<td></td>
<td>No</td>
<td>23%</td>
</tr>
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<td></td>
<td>Yes</td>
<td>63%</td>
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<td>Total</td>
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<td>100%</td>
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Table 2. Age results for the question “Are you annoyed by spelling mistakes on social networks or in email?”

<table>
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<th>Age variable</th>
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<td>48%</td>
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<td>33%</td>
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<td>23-29</td>
<td>32%</td>
<td>68%</td>
</tr>
<tr>
<td>30-35</td>
<td>36%</td>
<td>64%</td>
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<tr>
<td>36-44</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>More than 45</td>
<td>36%</td>
<td>64%</td>
</tr>
</tbody>
</table>

A quick analysis of Table 1 reveals some of the first trends: 63% of the population surveyed said they were “annoyed” by spelling mistakes (this rate reaches 77% if the unsure population is included). We note in Table 2 (answers “Unsure” and “No” have been combined) that the results vary according to age; statistics can help us detail the results. A Mann-Whitney test (see Annex 1), used as the data elements are not distributed normally, reveals a dependence between the age groups and the annoyance sentiment (p<0.05, sig=0.03), which means that, among the surveyed population, older people tend to be more affected by the phenomenon than younger people. However, while it is true that the percentage of population “annoyed” by spelling errors increases with age, we can observe a common trend with all ages combined: the majority of the population is bothered by the spelling variation (from 52% to 70%).

In order to refine this result and to understand the more precise population trends, statistical tests were carried out on demographic variables. For gender (male, female, other), education (primary education, lower-secondary education, upper-secondary education, non-university further education, university higher education, PhD) and job type (student, employee, senior executive, liberal profession, other) variables, we performed a chi-square test, the results of which are as follows. We observe a dependence between the gender variable and “annoyance” (p<0.05; sig = 0.02; $\chi^2$=8.26). Among the surveyed population, fewer men are worried about the phenomenon, whereas more women think they are affected. The results are in line with Labov (2001),
who shows that women do not tend to lead in linguistic changes “from below” (as opposed to changes “from above”, i.e. “prestige variants”). The following chi-square also shows a dependence between the level of education and “annoyance” (p<0.05; sig = 0.02; $\chi^2$=13.03). Among those interviewed, high school and university graduates reported a higher degree of irritation, while fewer students in a lower phase of the educational track reported being affected. These results follow previous observations, notably based on the analysis of SMS messages (Cougnon, 2015: 274). Lastly, we find no significant dependence between “annoyance about spelling errors” and “profession type” (p>0.05; sig = 0.248; $\chi^2$=6.65) – there does not seem to be any trend of this order. Finally, in the open-ended question Explain why spelling mistakes on social networks or in emails annoy you, we were particularly surprised to note that 56% of participants responded to this optional field. The length of their responses was 156 characters on average (approximately the traditional length of an SMS message) for a total of 7,000 words.

We will now begin a more detailed analysis of the observed responses. We examined the comments left following the invitation of Merton (1997) to be attentive to the unexpected results that the researcher encounters along the way, because they can be a source of “serendipity”.

3. Language Ideologies about Spelling Errors

3.1. A Faceted Classification of Ideological Arguments

The open-ended answers were classified manually and we identified seven categories, or “facets”\(^{10}\), which are part of the recurrent construction of ideologies in relation to the norm. Each facet is presented hereafter, followed by its percentage of occurrence, a definition and some examples from our survey.

1. Morality (35%): spelling errors reflect the speaker’s lack of morality, courage and good conscience. E.g. “a lack of rigor”\(^{11}\); “laziness”; “a lack of goodwill”; “disrespect”; “it's not complicated”\(^{12}\); “a bad example for children”.

2. Functionality (22%): spelling errors prevent the recipients from reading a message correctly. E.g. “it requires effort to interpret”; “makes reading difficult”; “complicates readability”; “prevents searches by keyword”.

3. Culture (22%): spelling errors damage cultural heritage. E.g. “as a Romanist, it is difficult not to react to misspellings”; “cultural heritage”, “legacy to be preserved”; “deformation of the French language”; “this indicates a decline in French language among young people”.

4. Social impact (8%): spelling errors put forward a negative image of the speaker. E.g. “it remains a social marker”; “in my environment, mistakes are misunderstood”. Some

\(^{10}\) We conducted complementary statistical analyses to try to determine whether certain facets are associated with sociological profiles, but these analyses did not yield convincing results.

\(^{11}\) All examples are our translations.

\(^{12}\) Classified here as a moral statement, as it means that it does not require much effort.
categorise others socially on this basis, assigning spelling errors to an inferior social origin. But the perceived inferiority is also cultural (“it is a sign of lack of culture, it makes me think that the person does not know how to write normally and does not attend courses”) and cognitive (“it makes the other person look a fool”; “it feels like talking to an 8-year-old”).

5. Aestheticism (8%): spelling errors deteriorate the beauty of language. E.g. “because it is very ugly”, “it attacks the beauty of the words”; “I find it disharmonious”; “less beautiful, it's very ugly”.

6. Semantics (3%): spelling errors alter the meaning of the interlocutor's statements and discredit the message. E.g. “less convincing”; “less interesting”; “not credible, unfounded”.

7. Physio-psychological impact (2%): spelling errors physically and emotionally affect the recipient. E.g. “to see messages that are not only intolerable but also very badly written, arouses a certain fury in me”; “this disturbs me”; “nervousness”; “displeasure”; “it hurts my eyes”; “sometimes it drives me nuts”; “I do not know, it is physical”.

The distribution of these facets in the open-ended answers shows a very large presence of arguments of morality, functionality and culture (these three facets cover 79% of the comments). The example in point 7, “to see messages that are not only intolerable but also very badly written, arouses a certain fury in me”, shows the possible overlapping of the facets in the same argument, as well as the ambiguity of the facets; are the messages semantically intolerable because they are badly written or intolerable and, moreover, badly written? In addition to this, the example shows, in its original version\(^\text{13}\), a morpho-syntactic mistake (incorrect agreement between the subject and the verb). This difference between production and ideologies about language is not a new phenomenon (Vignaux, 1988) and our data largely confirms this.

The analysis of the answers highlights another trend: the tolerance limit for spelling errors is dependent on several factors. Firstly, the influence of CMC features in the respondents’ speech is often considered to nuance the relative gravity of a mistake, depending on its context of use (“in an electronic message or not”). Secondly, the number of errors in a single message has an impact; while some mistakes may be tolerated (“it happens to everybody”), total laxity is severely condemned (“ok when it is limited, but not when it is everywhere”). Another commonly stated limit is the nature of the faults involved, and some distinguish between “acceptable” and “serious mistakes” (“this only annoys me when it is a common grammatical error”). In fourth position, respondents often use the argument of functionality to determine the margins of what is acceptable: nonstandard spelling is tolerated in some cases, when brevity or urgency is required (“I understand and I use abbreviations or emoticons to express myself where a short response is expected”). Finally, some respondents focus on the intention of the interlocutor (“I differentiate between abbreviations and spelling mistakes when someone tries to write correctly” or “some people do not do it on purpose”). Other respondents use the functionality argument to delegitimise mistakes, arguing that often these errors cannot be

\[^\text{13}\] Voir des propos qui ne sont non seulement irrecevables mais en plus très mal écrits suscitent [sic] en moi un certain acharnement ». 
justified (“it does not take longer to ‘write well’”) or are no longer justified (“the limit in number of characters is currently negligible (we have unlimited SMS packages)” or “there are now many tools to avoid spelling mistakes”).

3.2. Tensions and Emotions: Degrees and Naturalisation

The faceted typology presented above can also be detailed in terms of a continuum of instances, which can be affected by errors, going from oneself (“me”) to “others”. This continuum includes several degrees between “me” and “others”, such as the relationships and interactions between myself and others or the state and evolution of language or society.

Almost all seven facets could concern the speaker himself, just as much in the image he wants to render or have of himself – in his cognitive schemes (“as a Romanist, it is difficult not to react to spelling errors”), as in the relationship of the speaker with his interlocutors (“writing without spelling mistakes is showing respect to others. I try to pay attention to my spelling so I expect the same from others”), or even in the linguistic community as a whole and in its evolution (“a bad example for children or a negative orientation of our cultural heritage”, “a heritage to be preserved” and “a deformation of the French language”).

The intensity of the tension expressed shows variability and gradation; some say that they are irritated for personal reasons and use functional (“personally, it disturbs me” or “it complicates reading”) or aesthetic (“I think it is not beautiful”) arguments, or for emotional reasons, that can be deep-rooted (“it hurts my eyes”, “it is physical”). This “physical experience of emotion”\(^\text{14}\) (Bernard, 2017) reveals the strength of social commitment to this normative system and the value of spelling in society. Indeed, when it is deeply internalised, a norm can become a “value”, that is to say, something fundamentally important to individuals and on which some of them partly base their identity. While establishing their relationship to spelling, people position themselves socially, culturally and morally, and reveal who they are and to whom they wish to be close, as well as who they are not and with whom they do not want to connect. This is why a portion of the respondents do not just talk about themselves, they are drifting towards a judgment of what spelling errors induce on the social relationship that is established with their interlocutor. In this sense, the omnipresent concept is the lack of respect: “spelling as a social and moral code” and “a form of politeness”. This often leads to judgment towards others, a social, cultural and moral condemnation: it gives the respondent the impression of talking to a child, to someone uneducated, stupid, lazy or showing a lack of will. And this also leads to judgment towards the speaker himself: very frequently, we observe a “linguistic insecurity” in the comments. As Klinkenberg defines it: “there is insecurity as soon as the speaker clearly identifies the different varieties of a language (and its norms) and, at the same time, he is conscious that his own practices do not respond to these norms” (Klinkenberg, 2007: 4, cited in Cougnon, 2010).

To go one step further, we can say that we observe a real naturalisation of the writing system: “it seems normal and natural to know how to speak and write our mother tongue”. This legitimisation of properties as being “natural” (i.e. coherent to universal standards) enables a shift towards concepts such as “morality” and “health” (Accardo, 1997); therefore, it falls

\(^{14}\)“L’inscription corporelle de l’émotion”.
within the scope of a social hierarchy between oneself and others. In this case, it makes
the distinction between those who write correctly, who can thus convince themselves of their
superiority (including a moral superiority), and those who do not write correctly and usually
hold lower social and professional positions within society (see point 4. Social Impact). The
following comment illustrates the naturalisation process well: “French and writing are the basis
of what we are”.

Respondents go so far as to hold general statements about the evolution of language (which
would tend to become “impoverished” or “deformed”) and statements that essentialise the
practices of young people (who are supposed to be more concerned by errors and whose spelling
level decreases). Their discourse on the evolution of society (which would not preserve its
cultural heritage) and even on humanity as a whole (“we are moving towards a mediocre
humanity”) pertains to the same vein. This generalisation procedure comes from the fact that
these faults tend to spread by imitation and contagion, and become normalised because they are
trivialised, given their omnipresence. The mistakes then become unconsciously imposed by an
imperceptible phenomenon of habituation (i.e. if the phenomenon is a habit, it becomes a
personal trait, a “second nature”).

4. Discussion
This analysis emerged from our astonishment when we discovered the large percentage of
Thumbs4Science participants who wanted to express themselves about the open and optional
question *Explain why spelling mistakes on social networks or in emails annoy you*. Beyond the
percentage of comments received, we were struck by the emotions and moral values carried by
the comments; some of the respondents positioned themselves as “entrepreneurs of morality”
(Becker, 1985) on spelling matters and, more widely, on the evolution of society and its relation
to language. The subjective virulent perceptions are surprising, as we observe a relative
consensus on the importance of respecting spelling for the population, across all generations.
In a previous survey (Leporcq, Siroux & Draelants, 2013), we have already emphasised the
attachment shown by young people to spelling and the moral dimension of this question, even
among adolescents. The moral concern surrounding CMC’s supposed effect on language
change has also been highlighted by Thurlow (2006). Through an analysis of 101 print media
articles in which CMC is evaluated, the author describes its representation in the media in terms
of “moral panic” and a “grammar crusade”.

This gap between objective reality and subjective experience can be explained by multiple
reasons. Firstly, it can be explained by the fact that adults misunderstand the opinions of young
people about spelling, because it is undoubtedly not a topic that they frequently discuss
together. Based on the discourse we collected, we can say that there is every indication that
young people have incorporated the importance of respecting spelling, particularly in the
context of vertical interactions. We can also explain this discrepancy by the fact that opinions
about spelling are relatively independent of individuals’ skills and practices\(^{15}\). The absence of

\(^{15}\) In that respect, we observed that several comments reporting the decline in spelling levels include
spelling mistake types, defined by some as intolerable (notably agreement and conjugation types).
spelling devaluation in ideologies does not prevent some spelling issues that have arisen in new generations’ practices, for reasons that are probably less related to the CMC (Bouillaud et al., 2007) than to the evolution of schooling and school curricula (Manesse & Cogis, 2007). Finally, the hiatus can partly be explained by a misunderstanding by some adults of the cultural, stylistic and linguistic codes that accompany new technologies. They often consider plays on words as mistakes and don’t see that this code variation may respond to other linguistic rules given by SMS, social networks or instant messages. People who are used to communicating with these technologies do not become incompetent at spelling, but rather multicompetent, able to adapt their language registers and codes according to situations and interlocutors (Maeskens et al., 2015).

That said, the denunciation of orthographic variation may not result from a lack of understanding or a lack of writing skills. Most respondents (84%) make the distinction between misspelling and play on the language, to which the CMC gives rise. Some answers to the open-ended question mention multicompetence (“I understand and use abbreviations or emoticons to express myself where a short format (comment, sms, instant message) is expected”), but respondents use the argument in an unexpected direction: they consider that shorter spellings are not justified (“it does not take longer to ‘write well’”) or are no longer useful at the present time (“the limit of the number of characters is now negligible (unlimited sms)”; “there are many tools to avoid spelling mistakes”).

It thus seems that people are more irritated by the fact that new spelling trends (CMC features, etc.) do not single out those who deviate from the norm: they stigmatise the few who respect spelling. In their opinion, respecting spelling is unfortunately considered to reflect pedantry, rigidity, old-fashioned-ness, lack of humour or lack of contextualisation about one’s judgment (“Sometimes I feel that speaking correctly irritates people because they feel threatened or patronised”)

Therefore, besides arguments about cultural beliefs (“spelling is part of general culture, it is a heritage, a cultural heritage to preserve”), common beliefs about language (“impoverishment/deformation of the French language”) and about social and cultural evolutions (“decline in level”), the study informs us about the relationship with oneself and others. Speaking about others inevitably reflects, by contrast or mirror effect, an image of oneself. Individuals don’t realise that the “irritation” provoked by spelling mistakes is quite widespread and they see themselves as the “Last of the Mohicans” in spelling matters. As the identity of the person who today perfectly masters spelling is too “distinctive” (i.e. it conveys the perception of being excessive or intolerant), individuals feel constantly forced to keep the stigma at a distance in their discourse (“I am not a ‘grammar-nazi’, because I think that wanting to give lessons at all costs is rather vain”). Moreover, this identity can become more difficult to live with, simply because it forces them to act in a particular way (“I feel forced to correct faults and it annoys me”). This identity also seems difficult to bear and live with, given the rarefaction of the audience who can admire the “performance” (in the double sense of good production and of spectacle) of the person who perfectly masters spelling (Goffman, 1973). Finally, this identity is being devalued because of today’s possibility of using spelling tools (such as spell checkers); these tools now allow people to avoid the tedious learning process, of which the

16 Of course, this hypothesis should be examined in more depth in future work.
person who masters spelling partly takes advantage (“I find that spelling is an important value that spell-checkers and mobile phones tend to make less important”).

Spelling is an important source of information on ideologies about oneself, but also an inferential tool for information about others. As Goffman says:

> When one individual enters the presence of others, he will want to discover the facts of the situation. […] To uncover fully the factual nature of the situation, it would be necessary for the individual to know all the relevant social data about the others. […] Full information of this order is rarely available; in its absence, the individual tends to employ substitutes - cues, tests, hints, expressive gestures, status symbols, etc. - as predictive devices. In short, since the reality that the individual is concerned with is unperceivable at the moment, appearances must be relied upon in its stead. And, paradoxically, the more the individual is concerned with the reality that is not available to perception, the more must he concentrate his attention on appearances”.

Goffman (1956: 160-161)

This is particularly the case in our communication-oriented society, where social network dialogues and other CMC are part of daily life. In this form of communication, where we lack physical presence, language and spelling stand as the only social and identity markers. Spelling skills then become a relational competence (like *good manners*), essential in presentation and self-valuation activities, increasingly required in our society (Bernard, 2017).

Indeed, as Goffman points out, “The individual tends to treat the others present on the basis of the impression they give now about the past and the future. It is here that communicative acts are translated into moral ones.” (1956: 161). Most people are probably aware of this, which could explain why they tend to spontaneously reserve the use of SMS language for informal communications with friends. The moral dimension of spelling and the predominant role it plays in contemporary interactions is, nevertheless, and with exceptions (e.g. Thurlow, 2006), understudied. It seems to us to be a matter of great interest to the sociolinguist, which deserves to be further researched and taken into consideration by those who intend to reform spelling.

**References**


PETITJEAN C. (2009), *Représentations linguistiques et plurilinguisme*, Université de Provence/Université de Neuchâtel, Aix-en-Provence/Neuchâtel.


**Annex 1**

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<th>N</th>
<th>Mean Rank</th>
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**Test statistics**

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