

The convergent validity of the ontopsychological procedure of dream content analysis

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Summary. Similar to psychoanalysis, analytical psychology and gestalt therapy, the ontopsychological approach (OA) uses dream analysis in psychotherapy practice. In the present study, we tested the hypothesis regarding the correlation between the ontopsychological dream content analysis system and the Hall and Van de Castle (HVDC) system, which is the most accredited and applied coding method of dream content analysis. Thirty dreams which had been already-coded along with the main content categories of HVDC (available at www.dreamresearch.net) were retrieved by an independent external judge and submitted to two ontopsychological psychotherapists. They were asked to code the dreams along with the main categories used by OA dream content analysis system. To determine the correlation between the two dream content analyses from the two different coding systems (OA vs. HVDC), Spearman rank correlations were computed between OA dream contents and the corresponding contents in the HVDC system. Specifically, the correlations were computed considering the number of words or strings of words that were correctly identified and entered into OA categories which were comparable to HVDC categories. The OA system included six contents categories. Of these, five were consistent, although partially differing in their denomination, with five out of the nine main HVDC categories. Spearman rank correlation coefficients varied from 0.53 to 0.82 between these five OA categories and the equivalent HVDC categories. Moderate to high correlations were observed between the OA and HVDC dream codes in five comparable categories and this suggests that the ontopsychological coding system has satisfying, although preliminary, convergent validity.

Keywords: Dream content analysis, ontopsychological approach, validity

1. Introduction

The analysis of dream contents has a long-standing tradition which is strictly related to the origin of psychology (Freud, 1963; Kraepelin, 1962). In fact, historically, the contents and significance of dreams in clinical interpretation have been contemplated by psychoanalysis (Freud, 1963), analytical psychology (Jung, 1966) and gestalt therapy (Khodarahimi, 2009), and more recently by other psychological approaches, such as the ontopsychological approach (Meneghetti, 2008).

The ontopsychological approach (OA) is a complex and original method primarily derived from psychoanalysis, analytical psychology, and humanistic-existential approaches as theorized by Abraham Maslow (Maslow 1943; 1962). Analogously to psychoanalysis, the OA considers the individual as a complex system resulting from the union of psyche and body, where whatever happens in the body influences the psyche, and vice-versa. The truthfulness of this theoretical assumption of an interrelationship between psyche and body was recently supported by clinical re-

search conducted on patients affected by ischemic heart disease (Roncella, 2016; 2019). Larger trials remain necessary to confirm those results. Moreover, the efficacy of short-term psychotherapy, delivered with an onto-psychological approach should be also investigated among patient affected with other diseases to confirm the results obtained among cardiac patients. In that research, ontopsychological psychotherapy was proven to be effective simultaneously improving both psychological symptoms and cardiac prognosis (Roncella et al., 2013. Pristipino et al., 2019). In the same way as psychoanalysis, from the perspective of the OA, the synergy between soma and psyche is mainly unconscious in the individuals. However, OA introduces a new vision of the unconscious dimension, that is sustained by a positive nucleus, an existential entity of energy called ontic *In-Self*, which acts through the natural inner vitality that drives and sustains human life. This positive nucleus influences all aspects of life, such as biological instincts (e.g., hunger, thirst, sexual desires), cognitive abilities or personality characteristics (e.g., moral reasoning or cognitive styles, friendship, sociability). According to OA, in order to pursue both psychological and physical health, individuals must follow their inner positive vital boost or vitality. In particular, they should listen to the signals that their unconscious nucleus sends to communicate with consciousness in order to identify the best ways and solutions they should adopt for self-realization in the biological, affective, social, and spiritual dimensions. The unconscious expresses itself through both bodily and oneiric (dream-based) languages. As regards body language, for example, a dysfunctional physical symptom may hide some unconscious conflicts. In OA psychotherapeutic practice, it has been observed that

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patients who report some internal conflicts have lost contact in particular with their body visceral zone. In general, they felt that their body was foreign, as something separate from their mind. Sometimes, this perception was concentrated within a specific part of the body, which is felt as heavy or painful. Cardiac patients, for example, often referred to the sensation of heaviness in their head and chest (Roncella, 2016).

Other fundamental and distinctive concepts of ontopsychology include a different and more complex characterization of the *SuperEgo* than in psychoanalysis and a great importance given to the communication process, in particular non-verbal communication, represented both by Physiognomy-Kinesics-Proxemics, and the *semantic field* (Meneghetti, 2012). The semantic field is a concept developed by pioneers of the ontopsychological school. It is a specific aspect of unconscious communication, a complex interplay of psychic and biological data that emanate unconsciously from every person during all interpersonal interactions.

OA borrows certain techniques from psychoanalysis and analytic psychology, although it partially differs from them on the basis of some unique characteristics such as the concept of *ontic In Self* and a more complex characterization of the *Super-Ego*. Similarly to those approaches, OA considers dreams as elements of the unconscious activity; more specifically, they are the results of an interplay between unconscious and consciousness. For this reason, analysing patients' dreams could help ontopsychological therapists to trace back to the contents of the patients' unconscious. In ontopsychological clinical practice, psychotherapists guide patients into deeper insights through dream analysis to help them better understand messages of unconscious and gain complete contact with their natural vitality and identity, represented by their *ontic In Self*, so they can try to overcome their internal difficulties. According to OA, dreams are the avenues of output for the unconscious to gain awareness and the axis on which psychotherapy resolves.

In the last six decades, psychological dream research has largely studied dream contents with quantitative methods, and has extracted information from a body of dream reports in order to establish objectively identifiable characteristics. The application of explicitly defined procedures to analyse dream contents is an attempt to satisfy the scientific criteria of analysis replication (by other research groups), reliability, validity, and minimisation of subjectivity bias.

To date, it was noting that content analysis differs from dream interpretation for which common specific criteria have not yet been described in a reliable way (Klösch & Holzinger, 2014). Through dream content analysis, a large body of qualitative information may be reduced to a smaller form of representation and transformed into quantitative information, such as frequencies of specific contents. The term coding is commonly used to refer to the process of classifying dream contents into categories and subcategories. Hall and Van de Castle in 1966 established a set of empirical categories by reading hundreds of dreams and set up a system of categories. They published the first comprehensive coding system for the dream content analysis (Hall & Van de Castle, 1966). Even today, it is one of the best empirically proved coding systems which provides the largest and most systematic body of findings about what people dream (Klösch & Holzinger, 2014).

The dream coding system by Hall and Van de Castle

(HVDC) codifies all contents that are explicitly mentioned by dreamers into main categories (most of which are also divided into two or more subcategories): **characters** (persons, animals, mythical creatures), **social interactions** (friendly, aggressive, sexual), **activities** (physical activities, thinking, expressive communication), **achievement outcomes** (success and failure), **environmental press** (misfortune and good fortune), **emotions** (anger, apprehension, happiness, sadness, confusion), **settings** (indoor, outdoor), **objects** (such as architecture, body parts, household objects, clothing, food) and **descriptive elements** (modifiers such as size, velocity, age, colour; temporal scale; negative scale such as no, never, not, unsure), which are divided into subcategories with over 300 different coding options [<https://dreams.ucsc.edu/Coding/>]. Hall and Van de Castle reviewed much of the literature on dream research, and their content analyses of dream reports also provided useful information regarding some aspects of psychoanalytical theory, gender differences, and contextual factors affecting dream content (Smith, 2000).

As in analytical psychology and psychoanalysis, the most important aspect of dream analysis in the OA approach is dream content analysis and classification. This interpretation is preceded by a phase in which the therapist asks the patient to provide the description of the contents of his/her dreams in detail and clarify the context in which the dreams take place. This phase does not involve dream interpretation but rather a contents description and their classification into some main content categories.

This article addresses the challenge of the validity and relevance of the method applied by the OA to identify dream contents and summarize them in some main categories. Specifically, it intends to answer the question if the results of ontopsychological dream content analysis are compatible with other accredited systems of dream content analysis.

For this purpose, the convergent validity of the ontopsychological system of dream content analysis was investigated by evaluating statistically significant correlations between ontopsychological categories and HVDC categories.

2. Method

2.1. Study participants

N = 30 dream reports, which had already been coded according to the HVDC method, were retrieved by an external judge on the DreamBank, a collection of many thousands of dream reports gathered by A. Schneider & G.W. Domhoff [www.dreamresearch.net]. This collection is the largest available collection of dream reports that combines the results of a variety of different sources and research studies over the years into one online search interface.

The 30 dream reports consist of twenty dreams which come from twenty 12- and 13-year-old Californian girls and ten dreams of a single person, a 21-year-old unmarried male college student who was working part time as a door-to-door salesman for the Fuller Brush company (available at <https://dreams.ucsc.edu/Examples/>).

These 30 dreams were used in the present study. It should be pointed out that these dreams are available already coded on the DreamBank web site, for scientists or students doing research. The mean number of words in all these dreams was 168.1 words, with fairly large variations among them (SD = 63.0).

2.2. Procedure

Three clinical psychologists took part in the study, 2 women and a man (aged between 53 and 65 years). Two of them were specialised in the ontopsychological psychotherapeutic approach. The other one (here called the external judge) was an external senior researcher (MG) with documented expertise in behavioural sciences and in quantitative methods of content analysis.

The external judge invited the ontopsychological professionals to carefully read each dream and refer to their usual template, if any, for taking note of the occurrence and categorisation of dream contents. Firstly, he asked them to describe the most relevant categories of dreams applied by any ontopsychological psychotherapist for clinical purposes, blinded from the categorisation used by the HVDC coding system.

The ontopsychological professionals provided a list of categories and reached mutual agreement on six main categories: *Location or Place* (the physical setting of the oneiric scene), *Persons* (individuals and animals), *Action in mutation* (not a static action, such as looking at or hearing, but an action which intends to bring about change or solve a problem), *Sentiments*, *Objects*, *Number and colour* (i.e., colour, number, date and time, ordinal scales). In their opinion, all these categories reflected the common patterns and facets of dreams which are usually disclosed in the dream reports of patients attending psychotherapy sessions and in the didactic reports of pupils attending the Summer Session of Ontopsychology, held every year in Italy.

Then, the external judge provided the two ontopsychological professionals with the texts of the thirty DreamBank dreams translated into Italian and asked them to independently code the contents of these dreams into the OA categories. Finally, the external judge asked them to check each other's coding content and their placement into a category and discuss any divergent opinions until they resolved the inconsistencies and reached a consensus on the contents and categories in which to place the contents.

To obtain a valid Italian translation of the dreams, an initial translation was produced by two independent translators (the external judge and one of his colleagues), all fluent in both Italian and English. Then, each translator independently reviewed the versions produced by the other and provided comments and suggestions. Each translator included those suggestions that were considered as relevant in a second version. This process was repeated several times, until an agreement was reached. A final check was then performed to ascertain that all the contents coded in the English version were clearly present in the Italian version of dreams.

2.3. Codification

2.3.1 HVDC

As said the HVDC analysis of the 30 dreams contents and their placement into HVDC categories were already available in the DreamBank. For example, as far as the Californian girl 1 dream's contents, they are codified by the DreamBank into 5 categories: *Characters*, *Social Interaction* (subcategory *aggression*), *Environmental Press* (subcategory *misfortune*), *Emotions*, and *Settings*. Specifically, four contents (i.e., "my brother", "my Mom", "Joe", "little Chinese girls") are placed by the HVDC coding system into the *Characters* category, four contents (i.e., "obnoxious", "Mom told me I

had to get Joe out of the house", "I was mad", "my Mom got mad") into the *Social interactions* (sub category: *aggression*), two contents (i.e., "the house", "some ice-skating rink somewhere") into the *Setting* category, one content (i.e., "in my way") into the *Environmental press* (subcategory *misfortune*) and two contents (i.e., "I was mad", "my Mom got mad") into the *Emotions* category. The contents and their codes just now described can be seen at <https://dreams.ucsc.edu/Examples/girls01.html>.

2.3.2 OA

The ontopsychologists analyzed the dreams and for each dream they provided a list of contents considered relevant on the basis of their approach, also placing each of them into the relevant category from their point of view (among the six OA categories *Location or Place*, *Persons*, *Action in mutation*, *Sentiments*, *Objects*, *Number and colour*).

For the statistical analyses five categories were considered comparable among the two methods: *Persons or Individuals* was considered to be comparable to the *Characters* HVDC category, *Action in mutation* comparable to *Activities*, *Sentiments* to *Emotions*, *Place or Location* to *Setting*, *Objects* to *Objects* (these last 2 categories had the same denomination). The OA category *Number and colour* was not compared with the HVDC category of *Descriptive elements* in the present analysis, because it concerned only the presence of colours and numbers and therefore too different from the HVDC category of *Descriptive elements* which is more comprehensible and includes a lot of elements such as size, velocity, age, temporal and negative scales.

The contents of the 30 dreams detected and coded according to the OA procedure were considered as correct if they were the same detected by HVDC and placed in the comparable categories. Only for the purpose of correlation analysis (see below), a score of 1 was assigned to each content considered as correct (content identified at the same point in the dream where HVDC identified it and assigned to a category comparable to the one to which HVDC assigned it). Dream contents which were retrieved by OA but did not occur among the contents identified by HVDC were considered incorrect and they were assigned a score of 0. For example, referring to the above-mentioned dream of the Californian girl 1, a score of 1 was assigned if the OA procedure identified the content "little Chinese girls" and placed it into the *Persons or individuals* category (corresponding to *Characters* HVDC category).

2.4. Statistical analysis

The occurrence of HVDC contents which were correctly identified and placed by the ontopsychological professionals into OA categories that were comparable to the HVDC categories was computed.

The percentage of exact agreements between the comparable categories were computed dividing, for each couple of comparable categories, the total number of codings on which HVDC and OA systems agreed, by the total number of coding agreements plus the total number of disagreements between them. Disagreements were calculated as the number of HVDC contents not detected by the OA system plus the number of *original* contents detected by the OA system (which did not correspond to any contents detected by the HVDC system in the relevant category). For example, if the ontopsychologists made 47 codings for *Persons* and HVDC

made 48 codings for the comparable *Characters* category, and they agreed 45 times, then the percentage of agreement would be 45 divided by 50 (i.e., 45 ÷ 50 = .90 X 100 = 90%). This general percentage agreement formula is a standard reliability measure for all types of content-analysis studies in the social sciences (Smith, 2000).

In addition, a correlation analysis was performed between the number of contents included by the HVDC system in each HVDC category and the number of contents that were correctly identified and inserted by the OA method into a comparable category. For example, in the case of a dream for which 3 contents were identified and coded by HVDC in *Characters* and 2 of these contents were correctly identified by OA and placed in *Persons*, the scores imputed in the data base for that dream were 3 for *Characters* and 2 for *Persons*.

Correlation analyses between the comparable categories of the two coding systems were carried out using the Spearman's rank correlation coefficient. Specifically, the correlations between *Persons or Individuals* and *Characters*, between *Action in mutation* and *Activities*, between *Sentiments* and *Emotions*, between *Place or Location* and *Setting*, between *Objects* and *Objects* were calculated. All statistical analyses were two-tailed and performed using the SPSS 26.0 software package.

3. Results

The number of the coincident dream contents included in comparable categories by the two coding systems and defined as exact agreements, are depicted in Table 1. The comparison shows that the OA coding system identified the majority of contents identified by the HVDC system in the comparable categories (percentages of exact agreement range: 61 - 82%).

Specifically, the OA contents classified into *Persons* showed more than 80% of exact agreement with those inserted into *Characters* by HVDC. The contents inserted into *Action in Mutation* as well as the contents inserted into *Sentiments* showed more than half of perfect agreement with *Activities* and *Emotions* HVDC category, respectively. *Settings* and *Objects* had more than 70% of perfect agreement with the corresponding *Place* and *Objects* HVDC categories.

All the Spearman Rank correlations between the systems have reached statistical significance and ranged from 0.53 to 0.82.

4. Discussion

The purpose of the present study was to compare HVDC and OA methods of detection of dream contents and their categorisation into broad categories. Although there exist numerous coding systems, we used the HVDC as reference standard because most of the other available systems have only been used by the original investigators (limiting potential for comparisons across systems), many use weighting systems of questionable validity, and few are based on clearly defined and objective scoring criteria that yield good inter-rater reliability (Domhoff, 1996).

The findings point to a satisfactory compatibility of OA content search strategies with the strategies used by the HVDC content analysis approach. Applied to a set of HVDC dreams that had already been coded, the OA content analysis identified five of the major distinctive HVDC categories and evidenced an acceptable exact agreement of contents in these categories. This provides some preliminary demonstration of convergent validity between the ontopsychological system versus an accredited system of dream content analysis, such as that of Hall and Van de Castle.

Specifically, both OA and HVDC content searches and analyses provide acceptable exact agreements of contents which ranged from 61 to 82%, indicating a sufficient inter-method comparability in five comparable categories. Previous reliability studies have demonstrated that different coders who all applied the HVDC system achieved only fair to moderate exact agreements for several categories. The same authors, Hall and Van de Castle, reported moderate reliability coefficients by comparing their coding of *Emotions* (exact agreement 63%) and *Social Interaction* (e.g., 54% exact agreement for *Aggression*, 61% for *Friendliness*) (Schredl, 2010), indicating that even using the same method and having extensive practice they failed to yield perfect concordance. It should also be noted that this kind of reliability in these reliability studies is related to how the content categorisation and coding are applied and should not be confused with the reliability coefficients that are related to the stable measurement of inter-individual differences in classical test theory (Schredl and Erlacher, 2003). Consistently, other studies have shown that coders must be trained and then carry out subsequent discussions of disagreements in order to obtain higher percentages of agreement, especially in some categories, such as *Social Interactions* (Schredl et al., 2004). Regarding this latter aspect, in the authors' opinion, the OA method of content

Table 1. Comparison between HVDC and ontopsychological systems of dream content analysis. Proportion of exact agreement and correlation between HVDC and ontopsychological comparable categories.

HVDC Category/ Ontopsychological Category	HVDC system N° of Contents	OA N° of contents	OA N° of original contents	N° of coincident contents (% of exact agreement) between HVDC system and OA	Spearman correlation Test
Characters/Persons or Individuals	94	84	4	80 (82%)	0.75 (p < 0.01)
Activities/Action in mutation (N=10*)	77	59	6	53 (64%)	0.74 (p < 0.05)
Emotions/Sentiments	19	26	9	17 (61%)	0.82 (p < 0.01)
Settings/Place	51	62	15	47 (71%)	0.53 (p < 0.01)
Objects/Objects (N=10*)	72	54	1	53 (73%)	0.82 (p < 0.01)

Note: HVDC= Hall and Van de Castle; OA= ontopsychological approach.

*In the Dreambank, the coding for this category were only reported for 10 dreams of a 21-year-old unmarried male college student who worked in the Fuller Brush company.

analysis could be improved, especially if ontopsycho-logical professionals are exposed to the HVDC method in order to acquire further strategies and share further criteria of classification of dream contents. The findings of the present study seem to attest to the feasibility of this possibility because the systems have a discrete consistency in their basic approach, and the ontopsycho-logy professionals seem to be interested in the majority of contents that the HVDC system consider to be of importance.

The correlation coefficients found in the present study, which ranged from .53 to .82, can be viewed as satisfactory since validity coefficients usually cannot go beyond reliability coefficients (Schredl et al., 2004). The Setting/Place yielded the lowest correlation. This is largely due to a certain amount of original contents that the OA method included in the Place category compared to the Setting category. It is interesting to note that the majority of these original contents were registered by the HVDC system as Objects. This is the case, for example, of the *sand dunes* and the *snow drifts* (dream number 4 of the Brush salesman) and of the *big rock* and the *large room* (dream number 6 of the Brush salesman) which were all included in the Place category by the OA system rather than in the Objects category.

Some original contents were also included in the Sentiments by the OA system, which did not correspond to analogous contents considered by the HVDC system in the Emotions category. This demonstrated an overestimation of sentiments which was imputable to the OA criteria due to the use of a more inclusive categorisation of sentiments which captures the full range of affective experiences as much as possible. The examples coded with the HVDC system currently include 'basic' mostly negative emotions (anger, apprehension, sadness, confusion) whereas the Sentiments category considered emotions in dreaming in a more inclusive manner. It expanded the set of negative emotions and also included positive emotions often associated with transcendent or other impactful dream contents (e.g., pressure or self-appreciation). Other authors have observed that, regardless of the measure or method used, it is crucial to assess emotions in dreaming in a manner that is inclusive as much as possible (Carver, 2003; Carver et al., 2014). It has also been observed that for some dream characteristics such as emotions, it seems to be crucial to use self-rating scales in order to obtain more accurate findings (Conte et al., 2020). It should be noted, to be fair, that the HVDC method provides operational rules for coding as Emotions also the contents that describe a general state of pleasant feeling such as *pleased, gay, or joyful* or negative feelings such as *loneliness*. However, we did not find that these contents were always coded as Emotions in the girls' examples. For instance, in dream number 0004 belonging to a Californian girl, the phrases *I felt frustrated* and *I was really good* were not coded as Emotions. In the same way, the phrases *I felt alone* (dream number 0012) and *I, too, was laughing but was a little mad at the bartender* (Brush salesman's dream number 10) were also omitted as Emotions. It is possible that some codes in the examples were not reported in the website for the sake of brevity. In this case, it can be assumed that if these elements had been coded as Emotions in the examples, the exact agreement between Emotions and Sentiments would have been higher. Finally, it should be noted that the overall number of reported Emotions contents in the thirty HVDC dreams was relatively low. A higher frequency of HVDC Emotions could result in a

stronger correspondence with the OA Sentiments. May be the HVDC system categorizes Emotions in a relatively concise manner, adopting an analysis style that makes some feelings less recognizable to be coded.

The major concern of the present study is that it evidenced that three of the major HVDC categories, i.e., Social interactions, Achievement outcomes, and Environmental press, were not included in comparable categories by the OA. This difference reflects a design choice in ontopsycho-logical methodology which favours broad categories that gather as much data as possible in a unique category. In fact, some contents included by the HVDC system in the above mentioned categories were inserted by ontopsycho-logical psychotherapists into a unique category called *Action in mutation*. We report here some examples. In dream number 12 from a 12-13 year-old Californian girl regarding the phrase *I was trying to think of a way to get him and the rest of the group (out of sight) across while trying to keep my balance on the crumbly, narrow ledge*, the HVDC system classified *I was trying to think of a way to get him and the rest of the group (out of sight) across* as Friendliness (Social interactions Category) and *trying to keep my balance on the crumbly, narrow ledge* as Misfortune (Environmental press Category). In the same dream regarding the phrase, *I had been able to cross the stream while the rest of the group could not*, the HVDC system classified *I had been able to cross the stream* as Success and *while the rest of the group could not* as Failure (both belonging to Achievement outcomes Category). All these above-mentioned contents were classified by the OA method as *Action in mutation*.

To summarize, despite the various issues that have been considered, dream content analysis used by the OA is a relatively straightforward method that can be used to explore dream contents. In the authors' opinion, it can be appropriately used for the broad classification of dream contents in its current form, at least for five general categories which presented analogies with comparable categories of the HVDC method. The present findings also suggest that a considerable amount of dream content information can be extracted from the OA system in a similar way to the HVDC method. Despite the originality that ontopsycho-logy displays in psychotherapy theory, the method used for the dream content analysis did not rely on disguise or symbolism in categorising dreams, suggesting that a common universal method of approaching dreams is likely to be practicable also among different theories of mind and psychotherapy. Despite the fact that working with dreams in the ontopsycho-logy framework is highly theoretically determined, and the meaning of a dream is embedded in a theoretical concept rather than based on empirical observations, the OA dream content analysis is empirical and could ensure a reliable description of dreams which might be of interest to both scientists and psychotherapists.

5. Limitation of the study

The present findings should be considered preliminary. While some of the OA contents and categories were compared to the results of the HVDC, others were not covered by both approaches and a comparison was, at present, impossible. Therefore, the findings suggest that the OA is a promising way of analyzing dreams but this investigation does not allow general conclusions. In the future, the OA could make use of a design of other main categories.

Also, the current study investigated the main standard Hall and Van de Castle (1966) categories and did not explore sub-categories or, for example, specific categories of emotions. Exploring these variables would have provided more substance in the investigation of a convergent coding method of dreams. However, at present, the OA method is unable to detect different coding options within each category in such detail as the HVDC method.

Moreover, a replication (and extension) of the present study is needed. The inclusion of a large set of dreams would further improve our understanding of whether the pattern of categorisation and the proportion of correctly identified contents in the categories are confirmed. As regards to possible extensions and applications, we will consider previous research which indicates that dream content analysis based on written dream reports yields marked underestimation with regard to the number of dream emotions (Schredl, 2010). The present study suggests that dream content analysis based on the judgment of written dream reports yields marked underestimation with regard to the number of dream emotions. For some aspects of the dream like emotions or colours, it seems to be necessary to use self-rating scales in order to obtain more valid findings.

Speaking of replication, as also recognised by other methodologically similar studies (Holzinger et al., 2020), it should be acknowledged that other researchers who are not ontopsychoanalysts cannot readily replicate the present findings. In order to analyze the written dream reports with the OA, the completion of a specific training is required. Alternatively, if other researchers who do not have a background in ontopsychoanalysis wish to replicate the present findings, they will need to collaborate with specialists of ontopsychoanalysis, as in the present study.

Finally, another potential limitation could be the approach that we used to translate the dreams. In fact, our efforts concentrated on producing a good translation, while refraining from performing iterative back-translations. However, our approach was preferred considering that iterative back-translation has been criticized by several authors for both theoretical and practical reasons (Harkness, 1999). In fact, it has been described as a sub-optimal procedure for checking translations, which merely seeks to achieve linguistic and conceptual equivalence, while overlooking clarity and understandability (Bulmer, 1998).

6. Conclusions

The present findings provide a first validation of the OA in classifying dreams. The OA showed satisfactory preliminary validity as a method to classify dream contents.

Specifically, the present study suggests that the OA is a promising way of analyzing dreams albeit further validity and reliability studies should be done in the future. The findings presented might open new opportunities for future dream research studies and provide a further foundation for theorizing about dream content.

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