

Defining Diskarte: Exploring Cognitive Processes, Personality Traits, and Social Constraints in Creative Problem-Solving

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Despite being part of Filipinos' everyday experience, little research has been devoted to *diskarte* as a construct. This review aims to encourage theorizing about *diskarte* by framing it as creative problem-solving. I argue that there are parallelisms between *diskarte* and creativity; specifically, that *diskarte* involves the use of features present in creative ideation in order to respond to social problems. Hence, insights presented in this paper on *diskarte* are largely inspired by more than 70 years of creativity research. This paper further proposes that *diskarte* involves three elements: personality traits, cognitive processes, and social limitations. Cognitive processes include divergent thinking, cognitive flexibility, and making remote associations. Personality variables involve traits such as openness to experience and psychoticism. The role of social constraints in prompting the use of *diskarte* is also discussed. These insights are integrated into a proposed conceptual framework that can be utilized for future studies.

Keywords: Creativity, *diskarte*, Social Identity Theory, cognitive psychology, Sikolohiyang Pilipino

The July 2016 Labor Force Survey indicates that the unemployment rate in the Philippines is 5.4 percent, translating to about 2.3 million jobless individuals (Philippine Statistics Authority, 2017). Despite this unfavorable climate, Filipinos find ways of surviving. A woman augments her income by picking lice

and charging P20 per head, another serves as a wet nurse to earn P4,000 a month, while a man catches lizards, worms, and cockroaches to sell to students who need specimens to dissect (GMA News Online, 2012).

Filipinos may recognize this as an effective use of *diskarte*. Within psychological research, *diskarte* has been loosely translated as “strategy” or “approach” (Yacat, 2005). It has been used in the context of courtship (Rillera-Astudillo, 2007), work and negotiation (Gaerlan, Cabrera, Samia, & Santoalla, 2011), and surviving problems, from using public transportation, to academics (Yacat, 2005). From the field of anthropology, Bonilla (2013) discusses *diskarte* in the light of brinkmanship, or the pursuit of a strategy to the edge of safety. It was conceptualized in this case as part of a set of skills needed to survive Manila’s streets.

Unfortunately, despite *diskarte* being a central aspect of Filipino identity (Yacat, 2005), very little attention has so far been devoted to developing it as a psychological construct. Questions such as how it is utilized, who has *diskarte* and who does not, and what makes one’s *diskarte* good remain unaddressed. Proposing answers to these questions can enrich theorizing on how individuals possessing certain personality traits and cognitive abilities respond to social constraints within their environment. Furthermore, analyzing *diskarte* as an individual difference variable will enable researchers to create psychometrically valid and reliable instruments to measure it to help in assessment, training, and development of this characteristic. This review aims to jumpstart theorizing about *diskarte* by 1) reviewing definitions proposed in studies that have mentioned *diskarte*, 2) analyzing how the construct may be similar to or different from constructs such as intelligence and creativity, and what this implies for creating a working definition of *diskarte*, 3) proposing possible personality and cognitive process correlates that contribute to being *ma-diskarte*, and 4) examining the role of social constraints in one’s *diskarte*. From these insights, a tentative conceptual framework and future directions for fleshing out the *diskarte* construct will be proposed.

Dissecting *diskarte*

The “strategy” or “approach” translation implies that *diskarte* is simply problem-solving. Yet, how the term is understood and used by Filipinos appears to introduce nuances that go beyond this. In Yacat’s (2005) exploration of what it means to be a Filipino, a respondent said that, in addition to solving problems, *diskarte* involves an attitude, a “way we see things” (p. 27). Further elaboration reveals that *diskarte* is a valued cultural behavior (*asal*) that is identified as part of being Filipino. One of Bonilla’s (2013) respondents also stated that *diskarte* is unique to the individual in that it involves one’s own way of doing things (“*sariling paraan*,” p. 94). Another respondent likened it to being a “boy scout” or one who is resourceful, “street smart,” and able to leverage one’s life skills in order to live.

In the context of women’s employment, *diskarte* is seen as an ability to go beyond situational limitations to ensure survival (Gaerlan et al., 2011). Situational limitations do not only involve lack of resources, but unequal social positions as well. In Rillera-Astudillo’s (2007) study on courtship strategies, *diskarte* is used as a way of elevating oneself from a less privileged position (suitor) to a more privileged one (partner).

These studies show that *diskarte* involves environmental variables such as situational constraints and person variables such as perspective and values. Besides these, it appears to involve creative thinking as well. Gaerlan et al. (2011) discusses *diskarte* in the context of resilience and creativity, in that creative problem-solving is a ticket to overcoming hardships and coping with poverty.

In conceptualizing *diskarte* as a problem-solving strategy, it is easy to assume that *diskarte* is merely a function of, or even equivalent to, one’s general intelligence. A widely accepted definition of intelligence is that it is a combination of abilities required for survival and advancement within a culture (Anastasi & Urbina, 1997). Among this set of abilities, fluid reasoning (Gf) may be closest to how *diskarte* is described in everyday language. Fluid reasoning has been defined as purposeful but flexible

deployment of attention in order to solve novel problems that cannot be solved by depending exclusively on previously learned knowledge or scripts (Schneider & McGrew, 2012). It has often been operationalized as the use of logical thinking, inductive and deductive reasoning, or finding patterns among a series of abstract figures. It is closely related to convergent thinking, which involves a conservative approach to problem-solving in which there is an accepted or “correct” way of solving a well-defined problem. It involves starting with the assumption that the way things have always been done is the right way (Kim & Pierce, 2013). Traditional standardized intelligence tests that produce an intelligence quotient (IQ) score are believed to measure convergent thinking (Razumnikova, 2013).

Solving problems in everyday situations indeed necessitates levels of analysis, including finding patterns and using logic to arrive at the most appropriate solution. However, solutions to situations that prompt individuals to utilize creative problem-solving are often not hinged on finding the one correct answer. In fact, one may even argue that *diskarte* is necessary precisely because the way things have always been done was deemed inadequate. This is evident in the examples presented at the beginning of this article, in which individuals had to find alternative means of making money. This implies, then, that *diskarte* requires another set of cognitive operations that complement convergent thinking. Divergent thinking, defined as a cognitive approach aimed at generating numerous solutions to a given problem (Kim & Pierce, 2013) is often associated with creativity (Runco, 2013).

The relationship between IQ and creativity is tenuous, with some claiming they are distinct from each other and others claiming that creativity is simply a function of intelligence. A conciliatory view comes from the threshold theory of creativity proposed by Ellis Paul Torrance, which states that IQ and creativity may be related, but only if an individual’s IQ score is 120 and below. Beyond that, there appears to be no correlation (as cited in Runco & Albert, 1986). Empirical tests of this theory showed inconsistent results due to differences in how both IQ and

creativity were assessed (Runco & Albert, 1986). A more recent meta-analysis showed very little relationship between IQ and creativity after controlling for possible extraneous variables (Kim, 2005). On the other hand, other researchers have suggested that intelligence is a necessary, but not sufficient, requirement for creativity (e.g., Karwowski et al., 2016). Given these results, it may then be useful to assume that creativity is separate from intelligence, but both are needed in creative problem-solving.

Researchers have also framed *diskarte* as practical intelligence (Antonio, Benavidez, Ochoa, & Malaki, 2006). Sternberg defines this construct as one's ability to be successful in one's natural environment in such a way that it moves an individual closer to his or her goal (as cited in Ciancolo, Grigorenko, Jarvin, Gil, & Sternberg, 2006). In Sternberg's theory of successful intelligence (1999), he argues that certain skills, such as running a successful street stall, cannot be translated to succeeding at paper-and-pen tests. He thus argues that intelligence has three distinct aspects: analytical, practical, and creative, and prioritizing the development of one over the other may depend on one's environment. For instance, analytical intelligence may take the backseat to practical intelligence if one comes from challenging environments. These aspects have been operationalized in Sternberg's Triarchic Abilities Test (STAT) as follows: The measure for analytical intelligence involves analyzing, judging, and evaluating information, as typically seen in academic settings; the test for creative intelligence measures how well an individual adapts to novel situations; and the test for practical intelligence utilizes situations that arise in everyday life and determines how an individual applies his or her abilities to adapt to, select, and/or shape his or her environment.

However, construct validation and re-analysis of the data obtained from the STAT showed that these supposedly distinct aspects of intelligence were moderately correlated, and that the unitary construct of *g* still best explains the data obtained (Chooi, Long, & Thompson, 2014; Brody, 2003). Thus, in the interest of parsimony and given the limited research on practical intelligence, the analysis of *diskarte* may be better served by discussing it in

light of more established research on creativity, especially since practical intelligence as Sternberg had defined it can be subsumed under the emerging construct of everyday creativity.

Creativity is commonly defined as making something that is novel and appropriate to a given task (Runco, 2007a). Although commonly associated with the arts or scientific and technological innovation, creativity is not limited to these (Richards, 2007). Creativity research has distinguished between “eminent creativity” and “everyday creativity.” Research on eminent creativity, sometimes referred to as “Big C” creativity (Czikszentmihalyi, 1996), deals with processes and outcomes in people who have made a significant impact in their field, such as Picasso or Poincaré. Everyday creativity, or “little c” creativity, deals with processes and outcomes in people who may generate good ideas but use these simply to adapt to everyday situations.

Everyday creativity is believed to be essential to survival. It enables human beings to be flexible in adapting to their environment, make solutions up as they go along, and explore different choices to live an original life (Richards, 2007). While not everyone can be eminent, humans nevertheless live original lives. This implies, then, that everyday creativity is found in everyone. It does not only focus on a creative product, such as an original recipe or a completed scrapbook, but it also focuses on process and perspective, or how people do things (Richards, 2010). This parallels Yacat’s (2005) finding of *diskarte* as involving having a different take or perspective on a problem. Everyday creativity also incorporates one’s personal “style” or own way of doing things, as mentioned in Bonilla’s (2013) study.

Although *diskarte* shares characteristics with other constructs as discussed previously, there are important differences as well. Creativity enables an individual to express him or herself, adjust to his or her environment, and deal with the stress of everyday living (Runco, 2007b). What distinguishes creativity from *diskarte* is the latter’s emphasis on adaptation and adjustment, rather than self-expression. Another important distinction concerns the importance of domain-relevant skills.

Whether in artistic or scientific creativity, one needs to invest in developing the necessary knowledge to employ the tools of their trade. For example, artists need to have at least a rudimentary knowledge of their medium, writers need to develop an extensive vocabulary, physicists need to master theories and laws within their domains. *Diskarte* makes no such demands. Investing in specific skills may be part of one's *diskarte*, but it does not dictate one's *diskarte* as a whole.

Finally, everyday creativity is seen as being proactive and spontaneous (Runco, 2007b), while *diskarte* is reactive and adaptive because it largely involves solving context-sensitive problems. Everyday creativity involves anticipating problems; in contrast, *diskarte* often involves merely reacting to them. Hence, it appears that *diskarte* encompasses only a subset of everyday creativity – that which involves only adjustment and adaptation.

In summary, *diskarte* shares characteristics with both intelligence and creativity. Intelligence, particularly fluid reasoning, will enable people who have *diskarte* to solve problems they have never encountered before. Infusing this ability with everyday creativity will allow these solutions to be innovative and creative, such that it allows individuals to adapt to their environment, move towards their goals, and overcome their current struggles.

Table I summarizes the similarities and differences between *diskarte* and related concepts. It may be useful to view these concepts as contributors rather than equivalent constructs. Putting all of these together, a proposed definition of *diskarte* is that it is a creative form of problem-solving to address one's unique situational limitations so as to achieve one's desired outcomes. The next section discusses some of the possible cognitive and personality traits associated with *diskarte*.

Table 1. Similarities and differences of *diskarte* from related constructs

| Construct | Definition | Similarities | Differences |
|-----------------|--|---|--|
| Strategy | Plan of action to achieve an objective (Strategy, n.d.) | End goal is to meet an objective | May not necessarily include tactics that deviate from learned scripts |
| Style | Unique way of expressing or behaving (Style, n.d.) | Involves a perspective that may be deemed original or unique to a person | Not necessarily aimed at solving problems or achieving an objective |
| Resourcefulness | Ability to find ways to meet situations (Resourcefulness, n.d.) | Involves coping with situations | Not specific to addressing context-sensitive problems |
| Fluid reasoning | Purposeful and flexible deployment of attention to solve novel problems without relying on previously learned scripts (Schneider & McGrew, 2012) | Involves appraisal of patterns, including what works and what does not Involves solving novel, well-defined problems | Conservative Does not encourage deviations from established patterns Assumes that patterns or established ways of doing things are always correct Problems are well-defined |

| Construct | Definition | Similarities | Differences |
|------------------------|---|---|---|
| Practical intelligence | Ability to be successful in one's natural environment in such a way that it moves an individual closer to his or her goal (Sternberg, 1999) | Involves reacting and adapting to situational limitations | May not necessarily involve creative ideation |
| Everyday creativity | Use of creativity to adapt to life's circumstances (Richards, 2007) | Used to adapt to situational limitations Involves crafting original and effective solutions to everyday problems Involves process, perspective, and one's style of doing things | Proactive and spontaneous rather than reactive and adaptive More general than <i>diskarte</i> in that it involves self-expression in addition to problem-solving |

Elements of *diskarte*: Cognitive processes, personality traits, and situational limitations

Filipinos coined the term “*ma-diskarte*” to refer to individuals who are able to use their *diskarte* effectively. The importance of creative thinking in *diskarte* suggests that there are underlying cognitive and personality traits that may be common in both creative and *ma-diskarte* individuals. This section discusses these commonalities. Finally, because the social sphere provides the context within which *diskarte* emerges, it is also deemed an important element of the construct. This is discussed in the section as well.

Cognitive processes

One of the perceived hallmarks of creative thinking is making remote associations. The ease with which individuals are able to access more original ideas was attributed to the tendency to either respond negatively to the mundane or positively to the novel (Houston & Mednick, 1963). Under Mednick’s associative theory of the creative process, the first thoughts an individual has in response to a problem are typically not original. Rather, original thoughts have the tendency to be remote (as cited in Runco, 2007a). While creative and non-creative individuals are capable of making remote associations, the former can access these more readily than the latter. Combining seemingly disparate concepts can yield surprisingly creative results, such as the combination of unbeliever and leprosy (Ward, 2001), Harvard-educated and carpenter (Kunda, Miller, & Claire, as cited in Ward, 2001), or even “lice” and “money.” This is consistent with how *diskarte* has so far been conceptualized—that the usual solutions are deemed inadequate or inappropriate, hence the need to access original, more remote ideas.

Furthermore, creative thinking is said to involve the ability to be flexible in deploying cognitive control. This entails having to switch between relying on automatic responses and making more remote associations, especially if automatic responses are prone to error (Zabelina & Robinson, 2010). Another study has shown that some executive functions, particularly updating (monitoring

contents of one's working memory in order to replace outdated information with more relevant ones) and inhibiting (controlling dominant, automatic responses) predict creativity (Benedek, Jauk, Sommer, Arendasy, & Neubauer, 2014). These studies serve to illustrate that flexibility of cognitive control is necessary for the effective and timely use of the complementary processes of divergent (i.e. unconventional) and convergent (i.e. conservative) cognitive operations.

Similarly, *diskarte* appears to involve effective switching between utilizing divergent or convergent thinking. Divergent thinking allows an individual to generate multiple, uncommon, or unusual solutions to a given problem, while convergent thinking enables an individual to evaluate which of the possible solutions is most appropriate (Kozbelt, Beghetto, & Runco, 2010). *Diskarte* involves an appraisal of situational limitations and established patterns (convergent operations), devising original ways of transcending these limitations (divergent operations), and evaluating whether these ideas can be appropriate solutions to the current problem (convergent operations).

The Geneplore Model (Finke, Ward, & Smith, 1992) used in creativity research illustrates this interaction of divergent and convergent thinking processes. Generative processes include information retrieval, combination of concepts and images, and making associations between ideas. These processes result in candidate ideas that, while not necessarily the final solutions to a problem or task at hand, nevertheless provide sufficient starting points (Ward, 2001). An individual determines if a candidate idea is worth retaining if it satisfies their criteria for determining whether an idea is viable. This idea is then developed through processes that transform it, such as elaboration, modification, consideration of implications, and assessment of limitations, among a host of other exploratory processes. Finally, the model assumes that real-world considerations, such as social acceptability of candidate ideas or availability of resources, can influence the form that the candidate idea will take, an individual's judgment if it is worth pursuing, and the exploratory processes that will modify the idea into its final form. Although conceived

to explain creative cognition, the Geneplore model can be used as a template to understand how individuals decide on their *diskarte*.

Personality traits

Rothenberg states that one quality that creative individuals appear to possess is the ability to integrate two seemingly opposite characteristics at the same time (as cited in Runco, 2007a). Other examples of fluctuating between two opposite extremes include having both destructive and constructive attitudes (Haller and Courvoisier, 2010) and shifting from altruism to self-centeredness, as well as reality and fantasy (Maddux & Galinsky, 2009). This quality helps creative thinkers so that they are more capable of going beyond mental sets that are often conservative and unoriginal. As implied by the label “prosocial psychopaths” (Galang, 2010), creative individuals can also both accept and shun social norms.

In addition, the trait Openness to Experience (O) in the Five-Factor Model is most strongly associated with better performance in divergent thinking tasks (McCrae, 1987). Facets of this trait that may be relevant to *diskarte* include preference for variety and intellectual curiosity. Another trait that is popularly (and controversially) linked to creativity is psychoticism (Eysenck, 1993), with the following associated descriptors: being aggressive, cold, antisocial, egocentric, and impulsive. Although this link has been criticized (e.g. Runco, 1993), recent studies seem to support the relationship between creativity and antisocial behavior. Creativity was found to have a significant negative relationship with Honesty-Humility, a factor that looks at modesty, sincerity, fairness, and avoidance of greed (Silvia, Kaufman, Reiter-Palmon, and Wigert, 2011). Creative individuals are also more likely to cheat because they are hypothesized to be better able to maintain a positive self-image, despite their unethical behavior, as they are able to “tell stories” to rationalize their actions (Gino & Ariely, 2012). Narcissism, psychopathy, and psychopathic boldness were found to be positively correlated with creativity measures as well (Galang, Castelo, Santos, Perlas, & Angeles, 2016). The

willingness to bend the rules to achieve one's objective is also implied by some in discussing the concept of *diskarte*. To illustrate, one of Bonilla's (2013) respondents described *diskarte* as the ability to generate solutions even if these are unethical, embarrassing, or even illegal.

What *diskarte* research has that creativity research seems to lack is a discussion on positive values associated with it. In discussing *diskarte*, Gaerlan et al. (2011) proposed the values of having guts (*lakas ng loob*) and initiative (*kusa*). On the other hand, research on creative personality has been largely focused on antisocial traits, such as Eysenck's Psychoticism (Eysenck, 1993) and dishonesty (Gino & Ariely, 2012). Yet, the values Gaerlan et al. (2011) have identified and the antisocial traits associated with creativity are not necessarily mutually exclusive. Initiative and having guts can also be present in crafting strategies that test the limits of legality and safety, as in Bonilla's (2013) brinkmanship. Thus, if personality traits associated with being creative are also present in individuals identified as *ma-diskarte*, could having antisocial traits lead to more effective *diskarte* in terms of attaining one's objectives? To address this, the following sub-section scrutinizes the role of the social context within which *diskarte* is expressed.

Situational limitations

Unlike creativity, *diskarte* will always occur as a response to environmental constraints. As a result, an individual's *diskarte* can only be fully understood in light of the unique personal and social circumstances that prompted its use. The social context of the Filipino is one of pervasive inequality. For instance, in 2015, poverty incidence in the Philippines was estimated at 26.3 percent (Philippine Statistics Authority, 2016). Labor, employment, and education opportunities are characterized by inequality (Albert, Dumagan, & Martinez, 2015). This sets the stage for how *diskarte* is created and executed. In negotiations and in courtship, as well as in surviving problems and finding the means to pay the bills, a person who needs to employ *diskarte* starts from a less powerful

position in a social situation. These, together with other circumstances, provide formidable situational constraints.

Exploring the unique environmental challenges that necessitate using one's *diskarte* can allow us to frame the construct as a strategy of the less powerful to temper the effects of unequal social positions and resource limitations. In fact, even playing up one's less-privileged position can become part of one's *diskarte*. In Rillera-Astudillo's (2007) study on self-presentation among college students who wish to establish closer social ties (whether romantic or platonic), supplication—or appearing helpless, weak, and needing support from the target individual—was seen as a viable strategy that would allow them to achieve their goal. Individuals using this strategy were even seen as appealing by the targets.

Within this context of unequal social relations, the circumstances that would prompt the use of *diskarte* can be predicted by the social identity theory (SIT). SIT as a whole attempts to explain many intergroup processes by proposing that people have a social identity, which pertains to one's identification with the group in which one has been categorized. It further proposes that, in order for individuals in less-privileged groups to maintain a positive social identity, they can use strategies such as individual mobility (leaving the group altogether), social creativity (reframing the subordinate in-group to which one belongs in a positive light), and social competition (uniting the in-group to change their social situation). However, employing these strategies also depends on certain characteristics of the social situation, including permeability of boundaries, legitimacy of social categorizations, and stability of the position of one group in relation to the other (Ellemers & Haslam, 2012). One of the dimensions in which these strategies differ is in the extent to which they help the individual alone or the in-group as a whole.

Among the different strategies, current studies of low-status groups have consistently shown that low group identification predicted greater likelihood for utilizing individual mobility strategies (see Brown, 2000, for a review). Consider the

case of the woman who picked lice to earn money. Her *diskarte* emerged after recognizing that she belongs to a less privileged group (e.g. poor people) and that she wanted to be free of the limitations of belonging to this social category. Her *diskarte* benefits her alone rather than a larger group. In this sense, then, *diskarte* can be seen as a mechanism that falls within the individual mobility category, as it aims to achieve more personally relevant goals.

It should be noted, however, that the Filipino self may extend to include a few others. In Filipino psychology, Enriquez's concept of *kapwa* (shared identity) entails that other people within one's social sphere are categorized as *ibang tao* (IT; "not one of us") or *hindi ibang tao* (HIT; "one of us") (as cited in Pe-Pua & Marcelino, 2000). This concept of shared identity implies that the goals of one individual extend to others within the HIT category. As such, one's *diskarte* may also benefit close others as well as the self.

However, the focus on individual outcomes, as well as originality, may take a social and psychological toll. Otto Rank once characterized creativity as the expression of aspects that distinguish one from the group to which he or she belongs (as cited in Arndt, Routledge, Greenberg, & Sheldon, 2005). Originality, by its very definition, involves a break from convention, which includes norms and rules that bind a collective together. This then implies that *diskarte*, in order to effectively help an individual achieve his or her goals, will need to involve deviating from patterns. This can entail bending or going around the rules. The consequences of such action is predicted by the optimal distinctiveness theory, which proposes the existence of two opposing needs: the need for assimilation (e.g. "all of us need to follow the rules") and the need for distinction (e.g. "my unique circumstances should allow me to break some rules"). Satisfying one need involves sacrificing the other (Brewer, 2004). Hence, consequences of being original can involve alienating the individual from the group to which one belongs (Rank, as cited in Arndt et al., 2005). For example, one may be seen as being unscrupulous or unprincipled, as in the case of a *jeepney* driver whose *diskarte*

to make more money during trips is to disregard traffic rules (e.g. running a red light) in order to gain more passengers. Yet, this perception among others, especially those deemed as ITs, may pale in comparison to the prospect of achieving one's goals.

The conflict between assimilation and creative thinking was further examined by Ashton-James and Chartrand (2009), who found that behavioral mimicry during social interaction decreases divergent thinking because behavioral mimicry cues social acceptance or fitting in, which encourages convergent thought rather than divergent thought processes [Bahar & Hansel, Larey & Paulus (as cited in Ashton-James & Chartrand, 2009)]. Furthermore, divergent thinking and creative solutions are encouraged when there are limited opportunities for group assimilation (Arndt et al., 2005).

On a final note, culture as an omnipresent construct is important to consider in *diskarte* research as well. Culture drives what is recognized as being creative, and what is not. In Lubart's (2010) review of cross-cultural perspectives on creativity, Mpofu and his colleagues found that certain African cultures conceptualize creativity as a general ability that also incorporates inventiveness, resourcefulness, and wisdom, among others. Folk notions of creativity in collectivist cultures also include whether the product contributes to society's progress and whether it is accepted by others. In terms of language, the Polish have the word *kreatywnosc*, which corresponds to the notion of everyday creativity. In the same manner, *diskarte* could be the Filipino word that integrates strategy (*pamamaraan*), intellect (*talino*), and creativity (*pagkamalikhain*).

Simonton also proposes that societies characterized by multiple sources of power, political fragmentation, and even those at the hubs of cultural exchange exhibit more creative output because of the decreased pressure to conform and the availability of a more inclusive worldview (as cited in Lubart, 2010). Furthermore, exposure to other cultures allows one to access more novel concepts and ideas, which can then expand the number of perspectives one can take of one's problems (Maddux

& Galinsky, 2009). The Philippines' history of being subjugated under various colonizers affords the unique opportunity of being exposed to diverse experiences without having to leave one's own soil. Researchers may thus be interested in exploring whether *diskarte* was developed as a cultural behavior, especially after recognizing the need to be creative within social constraints imposed by colonial rule, as these constraints remain relevant to the present day because of the persistent presence of social inequality.

In summary, *diskarte* as creative problem-solving emerges in the context of situational limitations, such as social constraints and inequality of power, in order to transcend these. It involves the use of creative thinking processes such as making remote associations, divergent and convergent thinking, and cognitive flexibility to produce original ideas. Personality traits such as psychoticism, low honesty-humility, and willingness to bend the rules can also contribute to being *ma-diskarte*.

Is it possible to measure *diskarte*? Some notes

Creativity research has benefited from a number of measures. Some of these include focusing on creative achievement, the most popular of which is the Creative Achievement Questionnaire (Carson, Peterson, & Higgins, 2005). Other measures focus on behaviors that indicate creativity, such as the Hocevar's Creative Behavior Inventory and Batey's Biographical Inventory of Creative Behaviors (see Silvia, Wigert, Reiter-Palmon, & Kaufman, 2012 for a review). Less popular are creative personality scales, even if there has been rich theorizing when it comes to personality traits that make up a creative individual (see Selby, Shaw, & Houtz, 2005, for a review).

Of these measures, the most feasible technique to appropriate in the measurement of *diskarte* is to construct a self-report inventory of behaviors recognized as being *ma-diskarte*. From the studies reviewed, items can include "I have solved a problem successfully in a way that no one anticipated," "I have attained a goal using unconventional means," and "I have repurposed an item and utilized it differently from its intended use."

Other items may be generated after further research on what people qualify as *ma-diskarte* behavior. In addition, respondents may be asked about five situations in their lives in which they showed the most *diskarte*, similar to Jauk, Benedek, and Neubauer's (2014) technique in their Inventory of Creative Activities and Achievements.

A more ambitious *diskarte* measure is that which can assess the creative ideation behind crafting solutions. In creativity research, the Torrance Tests of Creative Thinking (TTCT; Torrance, in Kim, 2006) is one of the most established ways of measuring divergent thinking. The TTCT measures one's fluency (number of relevant ideas), originality (number of statistically infrequent responses to a question), elaboration (number of ideas added), abstractness, and resistance to premature closure, or the degree of psychological openness of an individual (Kim, 2006). The Unusual Uses task in particular may be helpful in illuminating an individual's capacity to conceive as many solutions as possible to a problem. This task involves generating uses for a common, everyday object, such as a fork.

If this technique is to be appropriated for measuring *diskarte*, questions should involve commonly-encountered situations at home, work, school, or in interpersonal relationships, such as finding one's way home while having limited finances. However, freely eliciting these responses would still require solving the problem of how to evaluate these strategies. If *diskarte*, like creativity, is a construct that is easily recognizable, perhaps it can be assessed through the Consensual Assessment Technique (CAT; Amabile, 1982) wherein experts are asked to rate the product in terms of a set criteria. However, the use of CAT in evaluating one's *diskarte* poses an interesting question of whether society recognizes so-called "*diskarte* experts," the same way that museum creators and multi-awarded writers can be recognized as experts in their domain. This is an important question to consider because inter-rater reliability has been shown to suffer when non-experts were utilized (Kaufman, Baer, Cole, & Sexton, 2008).

The criteria to be used for evaluation present another problem. Assessing creative products often revolve around the key criteria of novelty and appropriateness. In fact, Amabile (1982) criticized the lack of operational definitions when using these two criteria. While the novelty criterion is relatively easier to assess (i.e. whether the response is unexpected or unconventional), the criterion of appropriateness is less straightforward. In approaching *diskarte*, a key dimension of appropriateness that may be used is the solution's practicality or usefulness. For example, two possible solutions to the problem of going home without having enough money are to a) pick loose change from the streets until the minimum fare can be covered, and b) ride *jeepneys* that are packed with people so that one can pretend to have paid while conveying others' payments to the driver. Between the two unconventional strategies, (b) is more practical as it entails the least time and effort between one's current state and the end-goal.

The previous example illustrates another issue that complicates the evaluation of *diskarte*: that of ethicality. Individuals exhibiting creative potential appear to flout social conventions, a behavior that also appears when discussing *diskarte*. However, the question of adherence to rules holds more weight when evaluating *diskarte* than creative products, as the social nature of *diskarte* would necessarily involve considering the impact of a solution on others. Ethicality can perhaps be subsumed under the criterion of novelty or originality. As discussed in the previous section, original thinking comes with a price, and, in the context of *diskarte*, that price may include the willingness to engage in brinkmanship. One may need to dance on the edge of what is socially acceptable to address problems that have resisted conventional solutions.

SYNTHESIS: Toward a holistic investigation of *diskarte*

This review has framed *diskarte* as creative problem-solving in response to practical problems within one's social sphere. It differs from ordinary problem-solving in that it requires creative ideation, specifically divergent thinking, making remote associations, and flexible cognitive control, to generate original solutions. Personality traits of creative individuals that may facilitate the effective use of *diskarte* include openness to experience, psychopathic boldness, and accepting of some—but not all—social norms. An integral element of *diskarte* is the presence of constraints imposed by one's environment, particularly inequality in social positions or in resources. *Diskarte* is utilized to respond to these situational limitations. Following the predictions of SIT, this paper proposes that *diskarte* is part of a set of strategies for individual mobility to go beyond the limitations imposed by the social group with which an individual is identified. However, the optimal distinctiveness theory also predicts that the use of creative thinking may entail social costs, which can include alienation from one's social group.

Finally, this paper has presented some suggestions on measuring *diskarte*. Self-report measures are the most feasible, while a more ambitious project can involve creating an instrument using techniques borrowed from the Alternative Uses test and the CAT. Respondents can be presented with a real-life problem and asked to generate different ways of solving this problem. These solutions can then be evaluated using novelty and practicality as criteria.

Figure 1 shows a proposed conceptual framework for the study of *diskarte*. Cognitive processes and personality traits combine to contribute to creative problem-solving, but these occur within the context of one's environment. This same environment poses unique challenges to the individual, who thus uses creative problem-solving to address and transcend these environmental constraints. The use of creative problem-solving may result in positive or negative outcomes. Positive outcomes

can include goal achievement, as well as unintended but beneficial consequences to the self or close others. On the other hand, negative outcomes may include goals that remain unmet, negative judgment from others, and isolation from one's social group.

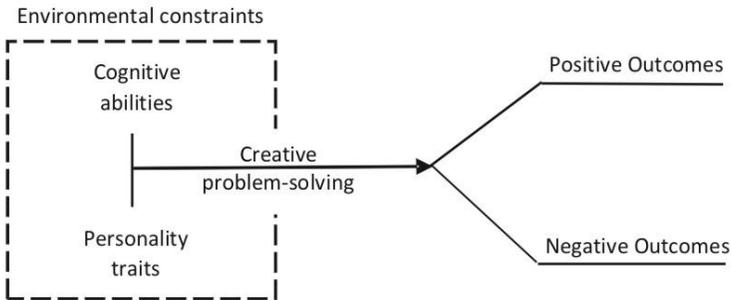


Figure 1. Proposed conceptual framework of *diskarte*

Moving forward, the most urgent topic to address is to create a consensus definition of *diskarte* that researchers can utilize. This paper proposes only a tentative definition of *diskarte* that may be further explored using qualitative approaches that aim to elicit how Filipinos define, view, and utilize *diskarte*, and in what specific contexts it emerges.

Furthermore, while Bonilla (2013) has touched upon the moral dimension of *diskarte*, this construct will benefit from further exploration of what makes one's *diskarte* right or wrong. An additional dimension to consider is its medium- to long-term consequences, such as sustainability of solutions and avoiding negative repercussions. The current review also frames *diskarte* as a relatively individualistic construct in terms of motivations and intentions. Further research may explore the impact of collaboration on one's *diskarte*. For example, several factors can either facilitate or undermine creativity in groups (e.g. Levine & Moreland, 2004). Could the same factors be present when other people are involved in crafting one's *diskarte*? On a related note, could *diskarte* intentionally benefit larger groups (i.e. ITs) beyond one's own self and immediate social circle?

There is still much work to be done to flesh out this construct. This article is an attempt to initiate such efforts by examining the scarce number of published studies that have sought to define *diskarte*. However, in the absence of further scholarly work, we must turn elsewhere for inspiration. Creativity as a construct has benefited from much research in the past 70 years. Because of its shared attributes with *diskarte*, it is deemed a fitting torch to illuminate the path of further *diskarte* research.

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