

Rethinking Resilience: COVID-19 and Creativity among Mysore Rosewood Inlay Artisans

Shipra Roy and Nilanjana Bairagi

Abstract

COVID-19 has disrupted the way of life in traditional clusters for the craftspeople and artisans, forcing them to reconsider and reinvent the ways in which they conduct their business and to continue in their traditional profession with resilience. The 150-year old practice of Mysore Rosewood inlay handcrafted products bears the imprint of the mind and hand of the craft practitioners. As there are limited studies on craft practices and creativity of artisans during the pandemic, an ethnographic study was carried out during the two-year period from July 2019 to June 2021 in the clusters of Mysore, Karnataka where the craft of Mysore Rosewood inlay is practiced. Creativity workshops were organized in the workspaces of these artisans. The Test of Creative Thinking – Drawing Production (TCT-DP) developed by Urban and Jellen (1989) was adapted and applied to study the nature and aspects of quality of creativity among these craft practitioners during the pandemic and resilience factors which have enabled them to adapt to the situational constraints. Data from visual research and creativity studies was analyzed and correlated with resilience of the artisans in carrying out craft activities with tenacity during the pandemic. The findings indicate that higher resilience co-relates to types (divergent/convergent) and levels of increased creativity in bringing changes through design, use of raw materials, and pro-active searches for orders through online platforms.

Keywords: Mysore rosewood inlay, creativity study and evaluation, design, skill, artisans

Introduction

“The craft heritage continues to evolve into modern times and the objects too are finding new and contemporary expression while the old and the traditional is still valued for the refinement they represent.”

(Ranjan and Ranjan, 2005, p.21)

The eponymous craft of Mysore Rosewood Inlay originated in Mysore (now Mysuru) city in Karnataka is an erstwhile princely state ruled by the Wodeyar dynasty from 1399 to 1947 under whose patronage it became the cultural capital of South India (Swamy and Shankar, 2012). Despite rapid urbanization, crafts continue to be an integral part of this state that takes pride in its heritage and culture. This inlay craft grew from the availability of Indian Rosewood (*Dalbergia latifolia Roxb.*) that grows well in conducive soil types which include red sandy soils, red loam soil or clay containing lime, and deep black soil. The technique involves insertion of materials such as ivory shells, mother-of-pearl, horn, sandalwood and recently, even plastic into shallow grooves on rosewood to form ornamented images that are flush with the base (Figure 1).

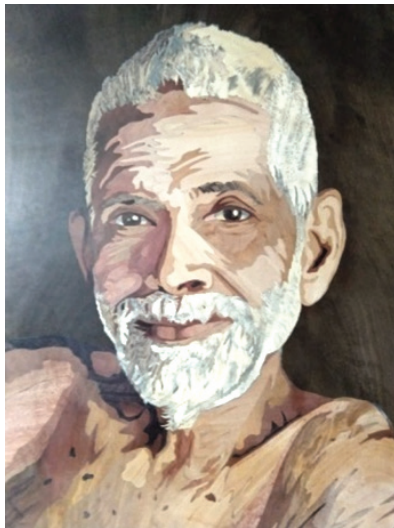


Figure 1: A portrait made with Mysore Rosewood Inlay technique

Source: Shipra Roy

This craft bears a strong imprint of its geographical origin, demonstrated through the choice of subject matter drawn from the local way of life, flora and fauna and other cultural symbols used for the designs. The subtle interplay of tints and tones of the color palette gives a painterly quality to this wood craft. A craft is identified by its intrinsic engagement with material and imprint of individual hand skills on the created artefact (Schön, 2017). Its value often derives from the historicity, artistic intervention of the maker drawing directly from cultural heritage using characteristic techniques and designs. The historicity and specificity of geographical origin with distinctive characteristics attributed to its origin, resulted in the intricate Mysore Rosewood Inlay craft receiving a Geographical Indication (GI) tag in 2005.

However, the disruption caused by the COVID-19 pandemic that led to widespread lockdowns, impacted lives, livelihoods and lifestyles that were earlier considered normal (Metzl and Morrell, 2008). Restrictions in public places made direct selling of craft products as souvenirs to the tourists, unviable at the time. Locked out of their livelihoods, the craft community and the sellers of craft products needed to leverage their resilience and creativity to deal with the situational adversity. Unanimously hailed for their creativity defined as 'the ability to make or otherwise bring into existence something new, whether a new solution to a problem, a new method or device, or a new artistic object or form' (Kerr, 2021) that underpins creative productivity mastery of a particular sphere of activity or knowledge that requires a high level of ability. Resilience, a trait defined as the process of developing the ability to bend and rebound to overcome adversity (Hernández, et al., 2015) was imperative for the craftspeople and artisans during this uncertain time so that their creativity reflected in improvisation and adaptative capacities, could drive the continued pursuit of craft-based livelihoods. The crafts community is 'inner-directed' (ibid.) with an inherent leaning towards reflection as they follow their intuition towards creative expressions. Against a cultural backdrop dominated by traditional knowledge and skills, creativity takes Center stage as it has the potential to emerge as an overarching influence for future expressions of artistry and ingenuity. In India, policy-based innovative strategies for national development are seeing increased emphasis on creativity.

While there is extensive scholarly literature on creativity, there are limited studies on the relationship between creativity and resilience in the artisan community, particularly during the pandemic. The objective of this study is to focus on the dimensions and expressions of creativity among the practitioners of Mysore Rosewood Inlay craft during the COVID-19 pandemic. To this end it seeks to address two questions. How can creativity traits of the artisans be studied? and, what is the relationship between creativity of artisans and their resilience? The answers of these questions lead to the selection of the most often used creativity assessment instruments. It also aims to investigate the interrelationship between creativity and resilience, which enables the Mysore Rosewood Inlay artisans to adapt to the changing scenario.

Research Methods

The research methods draw from ethnography as the conceptual framework with its study grounding in anthropology to study creativity and aspects of creativity and resilience among the artisanal communities in select clusters in Karnataka, South India (Figure 2). Multi-model research approach using methods of field study, visual research

of craft artefacts, participant observation, semi-structured interviews of artisans among the craft practitioners of the Mysore Rosewood Inlay was conducted in the three clusters namely Bannimantap, Mandi Mohalla and Karakushala Nagara. The selection of clusters was based on comparatively higher density of the artisan population. The study was conducted from July 2019 to June 2021. Addresses of the artisans were obtained from the data base maintained by the Development Commissioner (Handicrafts) office in Mysore. The addresses were analyzed to also identify the number of artisans practicing in one geographical locale.

Along with the ethnographic study, a creativity externalization workshop was conducted with the artisans to study their creativity traits such as openness to experience, ability to work with elements and concepts. Creativity is associated with openness and the ability to bring something new in existence and deal with ambiguity. Resilience is the capacity to spring back with positive adaptation. Inherent characteristics of resilience allows one to be flexible and deal with ambiguous situations. The openness and ability to deal with ambiguous circumstance and be able to adapt within the context is the positive link between creativity and resilience (Metzl and Morrell, 2008).

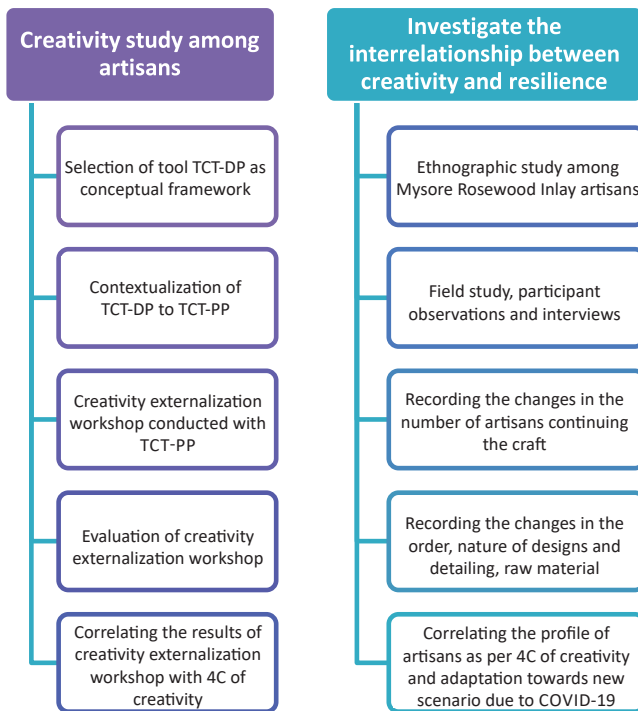


Figure 2: Research methods used for the study

Source: Shipra Roy

Selection of tests of creative thinking and creativity assessment methods

The Torrance Test of Creative Thinking (TTCT) developed by E. Paul Torrance in 1974 continues to be the most widely used creativity and validated divergent-thinking test for identification and evaluation of creative potential in educational settings. It tests creativity on verbal and figural stimuli. Based on psychologist J.P. Guilford's creativity test (Guilford, 1950), TTCT has been administered and refined over a period of time. The Test of Creative Thinking – Drawing Production (TCT-DP) framework developed by Klaus K. Urban and Hans G. Jellen (1986) has extended beyond traditional divergent thinking tests towards a more holistic and gestalt-oriented concept of creativity. Studies on cultural relevance of creativity based on TCT-DP with relevant parameters of assessment have been applied to other situations by researchers (Dollinger, Urban and James, 2004; Urban, 2005; Karkowski, 2008) points to a holistic approach of the TCT-DP creativity assessment test which includes aspects of risk-taking, breaking of boundaries and unconventionality. It recognizes that a single high score on a single component of creativity study does not necessarily signify a high level of creativity. In this case TCT-DP has been selected as the key research instrument to study creativity among the artisans.

Artisans of Mysore Rosewood Inlay craft engage with wooden patterns, but many of them are not familiar with the skill of drawing or sketching. Therefore, the researchers adapted the Test of Creative Thinking-Drawing Production (TCT-DP) to the Test of Creative Thinking-Pattern Production (TCT-PP), keeping in view the pattern production capability of the Mysore Rosewood Inlay artisans.

Creativity externalization workshop

Creativity research has moved from an almost exclusive emphasis on the creative person towards a more balanced inquiry of the nature of creative products and the conditions that facilitate their creation.

The TCT-DP test was first contextualized for the artisans based on their proficiency resulting in the component of drawing production (DP) being translated into pattern production (PP).

Creativity studies were also planned to ensure that language literacy of the artisans would not be a criterion for their inclusion in the workshop. The Four C model developed by Kaufman and Beghetto (2009) was used for evaluation of creativity

of the participants. Imagined as a life span concept, four developmental levels of creativity were considered. Big-C level of creativity is associated with eminent persons for their historically important contribution, Pro-C level of creativity focuses on work by professional but non-eminent practitioners whose work though valuable, may not be of outstanding significance, Little-C level of creativity is associated with the creative ability exhibited in everyday life, and Mini-C level of creativity is associated with personal, internal, expressive, and developmental aspects of creativity.

Profile of participants

Both male and female artisans registered with Development Commissioner (Handicrafts) office participated in the study with various levels of experience and achievement in craft, belonging to the age group of 27 years to 72 years. The artisans were informed about the purpose and the process of the creativity study. Their consent was sought before commencement of the study. The artisans were given wage loss compensation for participating in the study.

To determine the sample size for creativity study, confidence level of 95% was considered with confidence interval of 20 out of a population of 200 and statistical sample size was 22. The statistical sample size calculator available at survey system website was used. Invitations were sent to the artisans of the 22 workshops to be a part of creativity study, 18 participated.

The creativity workshop was conducted in June 2021 with 18 artisans from different workspaces in Mysore.

Development of instrument for creativity externalization workshop

The creativity externalization workshop using Test of Creative Thinking-Pattern Production (TCT-PP) was planned in the workspace of artisans in Mysore to ensure familiarity with the social and cultural environment. In continuation with the same principle, figurative elements for the pattern were developed by the researcher in wood with common geometric shapes: square, circle, rhombus, and line, which had similarity in meaning and affective response among artisans (Chen, et al., 2002; Shillo, et al., 2019). The attention was also paid to keep the pattern scalable to include multiple participants in the future without any change in the meaning of the pattern. The development of the shapes and their translation in wood is given in Figure 3.

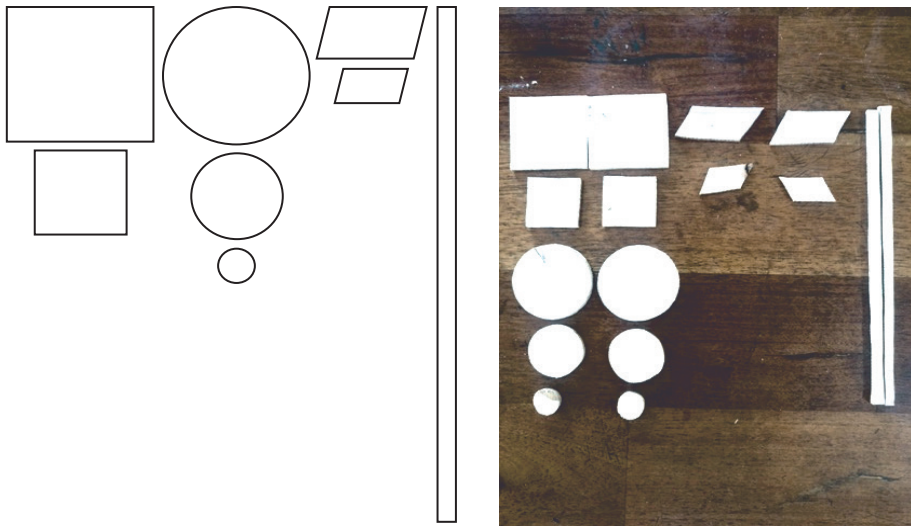


Figure 3: Developing patterns for TCT-PP study on paper (left) and on wood (right)

Source: Shipra Roy

Table 1: Developing Test of Creative Thinking-Pattern Production from Test of Creative Thinking-Drawing Production for Mysore Rosewood Inlay Artisans

S.No.	Creativity parameter as given in TCT-DP	As used for TCT-PP	Remarks
1	Continuations (Cn)	(Cn)	Cn and Cm was put under one criterion for artisans of Mysore Rosewood Inlay
2	Completion (Cm)		
3	New Elements (Ne)	(Ne)	Final pattern is seen for newness
4	Connections made with a line (Cl)	(Cl)	Contextualized to pattern creation
5	Connections made to produce a theme (Cth)	(Cth)	Contextualized to pattern creation
6	Boundary breaking that is fragment dependent (Bfd)	(Bfd)	No change
7	Boundary breaking that is fragment independent (Bfi)	(Bfi)	Contextualized to pattern creation
8	Perspective (Pe)	(Pe)	No change
9	Humor and affectivity (Hu)	(Hu)	Contextualized to pattern creation
10	Unconventionality, a (Uc, a)	(Uc)	Keeping four different criteria was not relevant to the Mysore Rosewood Inlay artisans and therefore only one Uc criteria was used
11	Unconventionality, b (Uc, b)		
12	Unconventionality, c (Uc, c)		
13	Unconventionality, d (Uc, d)		
14	Speed (Sp)	(Sp)	Sp was not used, pre-specified time to complete the task was given

The 14 evaluation parameters for TCT-DP developed by Urban and Jellen (1989) were also contextualized for TCT-PP with Mysore Rosewood Inlay artisans, and finally 9 parameters were used, as specified in Table 1.

Creativity externalization process in the workshop

The creativity externalization workshop started with a briefing by the researchers. The instructions were given in Kannada (language spoken in Karnataka state of India) and Hindi (official language in India), which was written beforehand by the researchers. All the participant artisans in the workshop were provided with two A4 sheets measuring 8 inches x 11 inches with two square blocks drawn on them. The dimension of one block was 8 inches x 8 inches and other block drawn outside the box was 1inch x 1inch dimension, as shown in Figure 4.

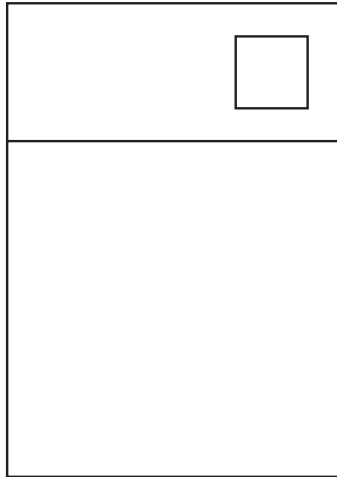


Figure 4: Square blocks drawn on paper given to the artisans for creativity externalization workshop

Source: Shipra Roy

Two different pattern development exercises were given: the first pattern, in which the artisans had complete freedom to develop the pattern on the given paper called as ‘free thought’ category. The second pattern called ‘designed pattern’ category gave the choice to the participants for making whatever they wished to but they had to give a title explaining the developed pattern.

The Mysore Rosewood Inlay craft is traditional in nature and artisans work on known themes. These two categories of patterns, ‘free thought’, and ‘designed pattern’ were

devised to understand the creativity of artisans with two different points of view respectively. The 'free thought' category gave them complete freedom to create what they wanted to and the 'designed pattern' category allowed them to create upon a pre-formed idea.

The artisans were given two sets of wooden pieces developed for the workshop as shown in Figure 3, one set for 'free thought' category and another set for 'designed pattern' category. The artisans were given total of 6 minutes (3 minutes for pattern development 'free thought' category and 3 minutes for 'designed pattern' category) for the activity. First the artisans were instructed to complete the pattern for 'free thought' category. After this, the instructions and the material for making the 'designed pattern' category was given. The workshop was held individually with every artisan to remove the peer influence and pressure. The artisans who completed the workshop were secluded from the artisans, who were waiting to participate. This was done to keep the knowledge and information about the workshop at the same level with every artisan. Once the workshop was completed, the art work was secured for future reference and evaluation.

Evaluation of the creativity externalization workshop

Evaluators for the creativity workshop were drawn from varied fields of design with experience in crafts (see Table 2). As outlined by Glăveanu (2012) care was taken to choose experts who were adequately familiar with the processes and techniques used to produce the craft. The following points were kept in view when choosing the evaluators:

- Direct involvement in the training of personnel in creativity
- Experiential or direct interaction with creation in their daily life and work
- Expertise in at least one domain of material experience from theoretical as well as hands-on perspective
- Those who have familiarity with the artefacts produced in the studied craft and have some degree of knowledge of Mysore Rosewood Inlay.

A total of 5 evaluators were drawn from various fields of creativity and design to assess the outcomes of the workshop. The artwork produced by the artisans were given scores by the evaluators.

Table 2: Profile of evaluators for TCT-PP

Evaluator No.	Educational background and Expertise	Years of experience	Years of experience with craft
1	Master's in fine arts	17+	12+
2	Master's in fine arts	20+	17+
3	PhD in design; Mechanical engineer and technical product design expert	20+	18+
4	Pursuing PhD in design; Knitwear design expert	17+	17+
5	PhD in design; Textile design expert	16+	15+

Outcome of the workshop

Two sets of artwork were designed by the artisans; one with 'free thought' category and the other with 'designed pattern' category as given in Figure 5. Two sets of shapes (Figure 3) were given to the artisans. It was clarified that each set of shapes was to be used only for one artwork.



Figure 5: Patterns developed by artisans under the 'free thought' category (left) and the 'designed pattern' category (right)

Source: Shipra Roy

Study on the Interrelationship between Creativity and Resilience

The capacity for resilience is positively correlated with creativity. Resilience enables one to handle problems and is fueled by experiences and learning, which develops

gradually over a period (Richtnér and Löfsten, 2014). Flexibility, adaptability, and agility are intrinsic concepts for resilience, but these traits need to get into action to be able to build resilient capacity. Adaptability is also one of the key concepts in creativity explained by Amabile (2013) in her consensual assessment technique. The concept of developing creativity is an incremental process and takes time to develop with reflection between actions, where reflection takes information from one set of actions and informs the next set of actions to make the next action better than the previous one. Resilience is also a concept that is centered around actions, which means that resilience is seen when the concept of flexibility, adaptability, and agility are seen in performance, at an individual level, social level, and collective level.

Findings

The ethnographic study revealed that there are two categories of production bases among the Mysore Rosewood Inlay artisans—the first in which the workshop is managed by an individual artisan handling the entire aspect of the manufacturing process of the artifact; and second, where a group of more than 3 artisans with compatible skills work together on making an artefact. Usually, Mysore Rosewood Inlay artisans sell their ware in exhibitions held outside Mysore or outside Karnataka. They also work on assignments received from Karnataka State Handicrafts Development Corporation (KSHDC), a Government of Karnataka undertaking where their products are sold through the Cauvery emporium outlets. Tourists also buy Mysore Rosewood Inlay products as souvenirs. The artisans usually make robust sales during the annual Dussehra festival in Mysore which witnesses a large inflow of both domestic and international tourists. However, the national lockdown in India disrupted the regular sources of revenue generation for artisans who usually supply to the Cauvery emporia on pre-ordered consignments, sell in the local market or to tourists visiting Mysore all year and especially during the annual Dussehra festival.

The research findings are divided into three categories: process of making Mysore Rosewood Inlay craft products, findings from the creativity workshop, and impact of COVID-19 on artisans.

Process of making Mysore Rosewood Inlay craft products

During the ethnographic research, it was observed that the making of craft products involves multiple skill sets in Mysore Rosewood Inlay and the artisans involve themselves in collaborative working. Figure 6 gives an overview of the processes involved in making of a Mysore Rosewood Inlay craft object.

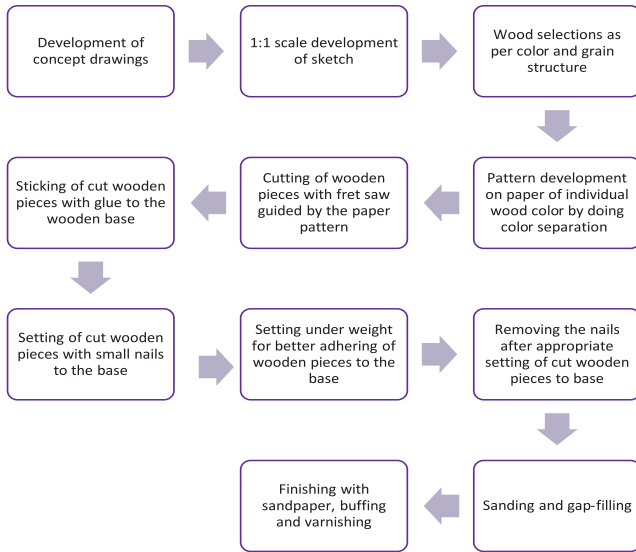


Figure 6: Process of making of Mysore Rosewood Inlay craft object

Source: Shipra Roy

The pattern developed on paper is stuck on the appropriate wood color and then cut by the artisan with a fret saw (Figure 7a). After all the pieces are cut, they are set on a wooden base (Figure 7b). The pieces are clamped down flat to ensure they are set on the base with precision. Hand-held machines and tools are used in the process of finishing. The final product which in this case, is a platter (Figure 8) is a contemporary expression of a handcrafted object that is not only for decorative purposes but caters to a functional need.



Figure 7a: Process of making Mysore Rosewood Inlay craft;

Source: Shipra Roy



Figure 7b: Fixing the pattern in progress on a wooden base



Figure 8: The platter as final product developed using the Mysore Rosewood Inlay craft

Source: Shipra Roy

Creativity among artisans

The scores obtained by the artisans on the artwork developed by them during the creativity externalization workshop led to determining the creativity of each artisan under the categories of 'free thought' and 'designed pattern' along with ranking of individual artisans.

Combining the categories of 'free thought' and 'designed pattern', most artisans were seen to possess strength in Continuations (Cn) and weakness in Boundary breaking that is fragment dependent (Bfd). The artisans work with traditional craft, which hinges on expertise pivoted on skills in manipulation of materials. Most of the artisans were very particular about not breaching the boundary of the big box drawn on the paper. The aspect of following the boundary in both material as well as designs of traditional crafts is reflected in the low score in the category of boundary breaking that is fragment dependent (Bfd).

The average percentage received by the artisans in the 'designed pattern' category is 84 percent whereas the average grade percentage received by artisans for the 'free thought' category is 79 percent. Art works under the 'free thought' category are not bound by any assumptions and it was observed that artisans found it more difficult to create the patterns. The concept of creating patterns for 'designed pattern' category follows the understanding of creating known ideas. The creation of known ideas is the expertise of the artisans since they work with pre-determined patterns, and it was observed that the artisans found it easier to create pattern for 'designed pattern' category.

Analysis of creativity in content-building and risk-taking category

The objective was to understand the relationship between the artisans' attitude towards content-building and risk-taking according to the grade categorization in Table 3. The nine creativity parameters used for the TCT-PP workshop outlined in Table 1, are further divided into two broad categories as indicated by Dollinger, Urban and James (2004) namely the content-building category and the risk-taking category. This categorization has been applied to the score received under the 'free thought' category and 'designed pattern' category.

Most artisans received a higher grade for content-building parameters compared to risk-taking parameters, which is explained due to the traditional nature of Mysore Rosewood Inlay craft.

Table 3: Score categorization under the content-building and risk-taking contextualized from Urban and Jellen (Dollinger, Urban and James, 2004)

Creativity parameter for content-building	Continuations (Cn)
	Connections made with a line (Cl)
	Connection made to produce a theme (Cth)
	Boundary breaking that is fragment independent (Bfi)
Creativity parameter for risk-taking	Newness (Ne)
	Boundary breaking that is fragment dependent (Bfd)
	Unconventionality (Uc)
	Humor (Hu)
	Perspective (Pe)

Correlation of scores derived from TCT-DP with Four C model of creativity

Kaufman and Baghetto (2009) proposed the Four C model of creativity which includes Mini-C, Little-C, Pro-C, and Big-C. The previous proposed model of creativity included only Little-C and Big-C. The movement of a person from Mini-C to Big-C can be seen as a continuum.

Table 4 shows the Four C of creativity (ibid.) which is contextualized to the Mysore Rosewood Inlay cluster correlated with issues in the context of Mysore Rosewood Inlay craft. Based on the ethnographic field study, the distribution of artisans across Mini-C to Big-C is presented in Table 4.

Table 4: Four C Model of Creativity (Kaufman and Beghetto, 2009) contextualized for Mysore Rosewood Inlay artisans

	Mini-C	Little-C	Pro-C	Big-C
Assessment method	Self-assessments	Artisan trainer/peer ratings	Peer opinions/recognition at the local level	Recognition at state/national levels through prizes or honors
Domain-specific	General interest towards craft as a new practitioner	Interest towards particular skill set/s	Recognized expertise in particular skill set/s	Specific craft pieces created as exemplary pieces of craft; in-depth understanding and proven display of individualized skill set/s
Motivation	Intrinsic	Intrinsic	Intrinsic and extrinsic	Intrinsic and extrinsic
Distribution of artisans	5 (27%)	3 (17%)	8 (45%)	2 (11%)
Traits of artisans	Practicing the craft for more than 1 year; not proficient in any skill and need help and close guidance to work in the craft; general interest in craft	Practicing the craft for more than 5 years; are not proficient in any particular skill set, but can work with specific instructions; can work with one or two techniques; particular about learning in craft techniques	Practicing the craft for more than 15 years; possess and honed at least one skill set; recognized among peer groups for their contribution to the craft; strive to earn awards and recognitions	Practicing the craft for more than 25 years; possess and honed all the skill sets; trained many trainees; recognition brought to craft through awards (National/State); open to new learnings and progressive in outlook



Creativity and resilience of Mysore Rosewood Inlay artisans

The root word of resilience is ‘resile’ which means to bounce back or spring back (Smith, et al., 2008). The lockdown due to COVID-19 diminished the opportunity for work to be carried out by the artisans. This ethnographic study during the period of lockdown revealed that due to the loss in income, many artisans stopped their artisanal practices and shifted to alternative sources of income. But at the same time, a few artisans chose to adapt to the changed situation by redefining the product through creative adaptation as explained by Cohen and Ambrose (1999). The trait of resilience among the artisans is studied through the designs and details of the product, changes in raw materials, and the product development process. These factors are elaborated below.

Detailing and designs

The lockdown and travel restrictions reduced the tourist population looking for souvenirs, which were mostly the relatively inexpensive craft items available in the local market. Buyers became more discerning in their choices and bought products for their designs and exclusivity.

Table 5: Comparison of design elements before and during the pandemic

Pre-pandemic period	During the pandemic period
 <p>Figure 9: Designs of lotus pattern done before COVID-19 <i>Source:</i> Shipra Roy</p>	 <p>Figure 10: Optimal use of inlay pattern on top of a table <i>Source:</i> Tanveen Ratti, designer</p>
<p>The inlay on the wood surface has more density, occupying more than 50% of the surface area.</p>	<p>There is minimal use of inlay work. The wood background uses most of the surface area.</p>
<p>The base color emphasizes the contrast between the background and details in the foreground.</p>	<p>The expanse of the background draws attention to the qualities of natural wood. The design elements and composition of the inlay motif creates aesthetic contrast.</p>
<p>More design elements and use of 7 types of natural wood in different hues increase the product opulence.</p>	<p>Less number of elements and 3 types of natural wood in different hues highlight the background through a minimalist approach to design composition.</p>
<p>More design elements draw greater focus on the overall appearance. This imposes less demand on the quality of the finish.</p>	<p>Minimal use of design elements place high demand on the finishing of individual elements. The focus is on the finesse of individual design elements.</p>

During the pandemic period, it was observed that design themes of the products were depictions of naturalistic motifs, as compared to the pre-pandemic period, which focused more on stylized motifs. Design development is done in a manner that the

naturalness of the motif themes is maintained and kept close to its occurrence in natural existence (the way it appears in nature), bringing a life like characteristic to the developed art pieces, as shown in Figure 9 and Figure 10. The new products are seen to be simpler in nature signified by the limited number of wood colors, which demand creativity and adaptability by the artisans (Table 5).

Raw material

During the pandemic period, for the newly commissioned craft work in Mysore Rosewood Inlay illustrates high level of selectivity and judicious selection of materials for the designs. Earlier artificially colored white wood or white plastic were also used in parts for price control. But the products being made now, demand high attention to detail and are exclusive in nature. Therefore, only natural wood veneers are used for inlay work. Few artisans have been able to adapt to the changes in designs and raw materials.

Types of products

During the pandemic, the artisans are exclusively engaged in developing wood inlay panels which are supplied to the buyer, who commission the pieces. The artefacts are not kept ready in the workspaces to be readily bought, as was the practice in the pre-pandemic period, due to the lack of retail buyers. The products are adjudged and valued for their exclusivity and not for the quantity of wood usage. This requires the artisans to be highly creative, skilled and flexible towards embracing change. The artisans were also observed to be responsive towards the design suggestions from the buyer's side. The products developed as collaboration between the artisans and the buyer is shown in Figure 11.



Figure 11: Images of products developed in Mysore Rosewood Inlay craft after COVID-19

Source: Tanveen Ratti, designer

Creativity of Mysore Rosewood Inlay artisans during COVID-19

In the pre-pandemic period, most orders for customization were received by the artisans in their workspace. Buyers and tourists would visit the workshop and select the designs from catalogues available with the artisans. Alterations, if any, were suggested and agreed upon based on which the artisans would commence work on the final product. After the onset of the pandemic, all discussions are followed up on email, WhatsApp, or video calls. Designs are finalized in digital mode. For buyers who place high-value orders, a sample prototype may be made on a reduced scale. However, such additional efforts were not made before the onset of COVID-19. Pandemic restrictions required the artisans to improvise on designs and the product development processes. Artisans with high risk-taking behavior as identified with the TCT-PP model, could adapt to the change in workflow. These artisans also were part of the Pro-C and Big-C categories as per the study conducted and outlined in Table 4.

It is observed that during the pandemic period, the artisans who received similar scores in the content-building and risk-taking categories as given in Table 3, continued with their craft practice. Their risk-taking ability enabled them to adapt to the changed scenario without undue loss of time through creative adaptation in design and details of products, raw materials, and product development process explained in Table 5. Artisans with more traditional thought processes got high scores in content-building parameters but due to the lack of risk-taking ability, they were unable to improvise on craft processes in the light of changing markets and moved to other avenues of employment.

Conclusion

The purpose of this study was to assess the creativity level of the Mysore Rosewood Inlay artisans and its relationship with their resilience. The study was conducted against the backdrop of COVID-19 in India and its effect on artisanal practices. It was established that there is a positive correlation between creativity of the artisans and their resilience. Artisans who are creative in nature with higher risk-taking ability could adapt to the changed scenarios translating into the continuation of work during COVID-19. Artisans in the Big-C and Pro-C categories have risen to the challenge and have been able to adapt to working with new designs and detailing of products. The ability to be flexible and adaptable, which are the key constituents of resilience allowing one to bounce back, have enabled the more creative artisans to seek solutions within their craft practices.

References

- Amabile, T.M., 2013. *Componential theory of creativity*. [pdf] London: Sage Publications. Available at: <<https://www.hbs.edu/ris/Publication%20Files/12-096.pdf>> [Accessed 20 July 2021].
- Chen, C., Kasof, J., Himsel, J.A., Greenberger, E., Dong, Q. and Xue, G., 2002. Creativity in drawings of geometric shapes: a cross-cultural examination with the consensual assessment technique. *Journal of Cross-Cultural Psychology*, 33(2), pp.171–187. <http://dx.doi.org/10.1177/0022022102033002004>.
- Cohen, L.M. and Ambrose, D., 1999. Adaptation and creativity. In: Runco, M. and Pritzker, S., eds. *Encyclopedia of creativity*. San Diego: Academic Press. pp.9-22.
- Dollinger, Stephen, J., Urban, K.K. and James, T.A., 2004. Creativity and openness: further validation of two creative product measures. *Creativity Research Journal*. 16(1), pp.35–47. http://dx.doi.org/10.1207/s15326934crj1601_4.
- Glăveanu, V. P., 2012. *Creativity and culture: towards a cultural psychology of creativity in folk art*. [pdf] London: London School of Economics and Political Science. Available at: <http://etheses.lse.ac.uk/415/1/Glaveanu_Creativity%20and%20culture.pdf> [Accessed 1 August 2021].
- Guilford, J.P., 1950. 'Creativity', *American Psychologist*, 5(9), pp.444–454. <http://dx.doi.org/10.1037/h0063487>.
- Hernández, Ó.S., Méndez, F.X. and Garber, J., 2015. Divergent explanatory production: the relationship between resilience and creativity. [pdf] *Electronic Journal of Research in Educational Psychology*. Available at: <<https://ojs.ual.es/ojs/index.php/EJREP/article/view/1666/2141>> [Accessed 2 August 2021].
- Jellen, H.G. and Urban, K.K., 1986. The TCT-DP (test for creative thinking-drawing production): an instrument that can be applied to most age and ability groups. *Creative Child & Adult Quarterly*. US: National Association for Creative Children & Adults, 11(3), pp.138–155.
- Jellen, H.G. and Urban, K.K., 1989. Assessing creative potential world-wide: the first cross-cultural application of the test for creative thinking—drawing production (TCT-DP). *Gifted Education International*, 6(2), pp.78–86. <http://dx.doi.org/10.1177/026142948900600204>.
- Karkowski, M., 2008. *Measuring creativity using the test of creative imagination (TCI). Part 2. On validity of the TCI*. [pdf] Poland. New Educational Review. Available at: <<https://tner.polsl.pl/e15/a17.pdf>> [Accessed 22 July 2021].
- Kaufman, J.C. and Beghetto, R.A., 2009. Beyond big and little: the four C model of creativity. *Review of General Psychology*, 13(1), pp.1–12. <http://dx.doi.org/10.1037/a0013688>.
- Kerr, B., 2021. Creativity. *Britannica*. [online] Available at: <<https://www.britannica.com/topic/creativity>> [Accessed 11 March 2022].
- Metzl, E.S. and Morrell, M.A., 2008. The role of creativity in models of resilience: theoretical exploration and practical applications. *Journal of Creativity in Mental Health*, 3(3), pp.303–318. <http://dx.doi.org/10.1080/15401380802385228>.

- Ranjan, A. and Ranjan, M.P., eds., 2005. *Handmade in India*. Ahmedabad: COHANDS, DC(H), NID, Mapin Publishing Pvt. Ltd.
- Richtnér, A. and Löfsten, H., 2014. Managing in turbulence: how the capacity for resilience influences creativity. *R and D Management*, 44(2), pp.137–151. <http://dx.doi.org/10.1111/radm.12050>.
- Schön, D.A., 2017. *The reflective practitioner: how professionals think in action*. [e-book] Taylor & Francis Group. <http://dx.doi.org/10.4324/9781315237473>.
- Shillo, R., Hoernle, N. and Gal, K., 2019. *Detecting creativity in an open ended geometry environment*. [pdf] Proceedings of the 12th International Conference on Educational Data Mining (EDM 2019), Available at: <<https://files.eric.ed.gov/fulltext/ED599199.pdf>> [Accessed 24 June 2021].
- Smith, B.W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P. and Bernard, J., 2008. The brief resilience scale: assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, pp.194–200. <http://dx.doi.org/10.1080/10705500802222972>.
- Swamy, C. and Shankar, B., 2012. Architecture and heritage resources of Mysore City. [pdf] *International Journal of Modern Engineering Research (IJMER)*. Available at: <http://www.ijmer.com/papers/vol2_issue2/X022139143.pdf> [Accessed 22 June 2021].
- Torrance, E.P., 1974. *The torrance tests of creative thinking-norms-technical manual research edition-verbal tests, forms A and B- figural tests, forms A and B*. Princeton: Personnel Press.
- Urban, K.K., 2005. Assessing creativity: the test for creative thinking - drawing production (TCT-DP). *International Education Journal*, 6(2), pp.272–280.

About the authors

Shipra Roy is an Accessory Design graduate of NIFT, New Delhi with a post-graduate degree in Anthropology. She is currently pursuing doctoral research studies from NIFT under the supervision of Dr. Nilanjana Bairagi. Shipra's specialization lies in the areas of design process, philosophy, ethnographic research, and handcrafted processes, and is empaneled as a designer with DC (Handicrafts). She joined NIFT, Bengaluru in 2004 and has been in academics for the past 20 years, where she has been involved with curriculum development and immersive pedagogic practices in design subjects. Her research interest has also led to presentations and publications of papers at various platforms. Apart from academic responsibility, she plays a key role in academic administration-related activities. To maintain a practice-based approach in design, she has been working on many professional projects as a designer with professional and government organizations such as KVIB, CSB, TRIFED and DC(H). Her involvement with crafts has also led to her association with the USTTAD project.

shipra.roy@nift.ac.in

Nilanjana Bairagi is an Associate Professor in NIFT Bengaluru, India. She holds M.Tech and Ph.D degrees (2008) in Textile Technology from the Indian Institute of Technology, Delhi. She has more than 18 years of academic and research experience. Her main areas of research are designing of functional apparel, product innovation for the Indian fashion industry, sustainable fashion, designing for special needs and craft research. She has a number of national and international research publications to her credit and has co-authored four chapters in the Functional Textiles and Clothing Book, Springer Publications (2019 and 2020) and 2 chapters in Design for Tomorrow, Volume 1 and 3, Springer Publications (2021). She has been guiding doctoral researches at NIFT since 2009 and 4 of her scholars have been awarded PhD. She received one of the most distinguished papers award at the 8th International Conference on Research in Design (ICoRD 2021) along with her co-author.

nilanjana.bairagi@nift.ac.in