



What drives design? Examining the influence of motivational factors on creative product output.

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Willingness to begin, continue and complete a creative endeavor is a major factor related to output. On the motivational continuum are two stimuli affecting self-determined motivation: (1) intrinsic motivation – desire to involve oneself in a task solely for personal gratification or pleasure, and (2) extrinsic motivation – influence of outside factors on one’s desire to involve oneself in a task (Ryan & Deci, 2000). Extrinsic motivation is significantly considered a detriment to creative production when compared with intrinsic motivation (major driving force for creative output) (Amabile, Hill, Hennessey & Tighe, 1994). Yet in apparel design, consumers, markets and strenuous fashion calendars drive production and thereby creative production. Therefore, the purpose of this investigation is to investigate motivational tendencies of apparel design students compared with independently assessed creative product output. .

Methodology

A convenience sample of 32 undergraduate students enrolled in comparable pattern making courses from two separate southeastern universities was chosen. The Work-Preference inventory (WPI) - College Student Version was administered to measure motivation tendencies. Following administration of the WPI, participants completed a design brief to create a three-piece ensemble from the same landscape photograph provided by the researcher. After collecting completed illustrations, six independent judges, mixed between three ‘experts’ and three ‘advanced novices’ used the Consensual Assessment Technique (CAT) (Amabile, 1996) to evaluate the creativity levels of the designs illustrated.

The WPI is a survey instrument developed by Amabile et al. (1994) to measure perceptions of motivation regarding work efforts. Each scale item is structured to evaluate perceived level of motivations from *never or almost never true of me* to *always or almost always true of me* regarding personal work. Items address the major elements of both intrinsic and extrinsic motivations. Intrinsic motivational elements include: (a) self-determination (preference for choice and autonomy), (b) competence (mastery orientation and preference for challenge), (c) task involvement (task absorption and flow), (d) curiosity (preference for complexity) and (e) interest (enjoyment and fun). Extrinsic motivational elements include: (a) evaluation concerns, (b) recognition concerns, (c) competition concerns, (d) focus on money or other tangible incentives and (e) focus on the dictates of others (Amabile et al., 1994).

Structured on a 7-point Likert scale (1 “very low” to 7 “very high”), CAT uses three or more evaluators, with a demonstrated proficiency and/or understanding in a specific domain, to independently assess the creativity and technical qualities of creative projects. Out of 15 total scale items, only the seven used to measure creativity are used for data analysis. Seven items measuring the creativity construct are creativity, novel use of materials, novel idea, effort evident, variation in shapes, detail and complexity. In an effort to eliminate testing effects, each judge received a sealed packet with instructions for evaluation. Individual measures and the

order of evaluations were randomized between judges. Additional criterion for assessment included: independent evaluation, proficiency and knowledge in the domain, subjective interpretation of the scale items and comparison of the illustrations against others in the sample versus an industry standard or personal ideal.

Results and Discussion

Correlation analyses indicated non-significant findings, counter to previous research reported. Intrinsic motivation tendencies and creative output evaluations showed a positive linear relationship, but without statistical significance, $r(30) = .16, p = .19$. Similar results for extrinsic motivation indicated a negative relationship, but without significance, $r(30) = -.17, p = .18$. Sub-categories for intrinsic (enjoyment and challenge) and extrinsic (outward and compensation) with creative product output produce similar results: enjoyment, $r(30) = .10, p = .30$; challenge, $r(30) = .19, p = .15$; outward, $r(30) = -.05, p = .39$; and compensation, $r(30) = -.18, p = .15$.

Reliability analyses of correlations between theorized sub-categories and respective overall intrinsic and extrinsic results indicated sufficient instrument reliability and sub-category validity: enjoyment, $r(30) = .90, p < .001$; challenge, $r(30) = .91, p < .001$; outward, $r(30) = .81, p < .001$; and compensation, $r(30) = .65, p < .001$. Interrater reliability analyses of CAT showed acceptable levels of agreement, $\alpha = .85$ for creativity ratings. Therefore, researchers concluded the instruments used are adequately reliable and valid, yet the theorized relationships from previous domains of creativity studies are not supported by results specific to apparel design.

Motivation specific to apparel design might be more complicated when compared to traditional visual arts or design. Success in apparel design is often attributed to commercial sales, collection reviews in a handful of elite publications, and/or award/recognition via reality television and/or national councils. Even with creative scholarship, peer-reviews and acceptance into juried competition provide validation for academic designers. As compared to the professional artist, who may take years to complete a masterpiece, professional designers create multiple pieces, multiple times per year, with the expectation to repeat year after year. Therefore, traditional theories on motivation and creativity become suspect when examining the creative/commercial arts, like fashion. Results from this study indicate sub-categories of motivational types do not provide significant data to support, in any part, previous theories and assumptions about motivation and creativity. Therefore, further research is needed into the elements of motivational types to determine if single elemental factors contributing to subcategories might be identified as a key component to motivation of apparel design creative product output. Identification of motivational factors will translate directly to the classroom and curriculum development, as courses and teaching styles might be adapted to maximize creative output from apparel design students.

References

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