The Nature of Creativity in Occupational Therapy: Views of US Occupational Therapists

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Abstract

The purpose of this study was to document occupational therapists’ reported use of “creativity” in different practice realms, discover how they defined creativity, and determine their views on its importance to the field. A survey was sent to a random sample of 250 therapist members of the American Occupational Therapy Association. Seventy surveys were returned (28%). Descriptive statistics were calculated to portray responses and reveal relationships between demographic and response variables. The majority of respondents worked in children/youth, or rehabilitation settings. Therapists practicing 35+ years reported creativity in occupational therapy to be significantly more important \(M = 8.1\) of \(10\) than in other professions, compared with therapists in practice 0 – 5 years \(M = 5.3\) of \(10\). Seven themes emerged from answers to, “As an occupational therapist, when are you most creative?” The most prevalent were treatment planning/adjustment, difficult/challenging situations, and problem solving. The words – ability, using, new, and make – were most frequently used in response to the question, “What is your definition of creativity?” Although creativity is sparsely documented in occupational therapy literature, therapists reported it as integral to the occupational therapy process \(M = 8.96\) of \(10\) and client outcomes \(M = 8.66\) of \(10\), and vital to the field of occupational therapy \(M = 8.94\) of \(10\). More research is recommended to explore the role of creativity in occupational therapy and its use by therapists in practice.
The Nature of Creativity in Occupational Therapy

Occupational therapy (OT) is largely known to be a creative profession both as a practice and in its use of creative activities for the benefit of clients (Graham, 1983; Mattingly & Fleming, 1994; Rogers, 1983; Schmid, 2004; Thompson & Blair, 1998). The foundation of the practice arose from the concept that the promotion of meaningful activities has therapeutic value (Levine, 1987). Meaning in an activity is produced through distinctive properties that motivate or inspire participation (La Cour, Josephsson, & Luborsky, 2005). During the infancy of OT activities such as arts and crafts were regularly used to create this inspiration (Levine, 1987). It was the creative aspect of these activities that distinguished them and gave them added value (Gordon, 2009). It can be argued that the creation of activities that are tailored to an individual takes a complex measure of problem solving and client understanding. There is a belief that because of the individualistic considerations of the profession when treating clients, the basis of the field is centered on the principles of imagination, creativity, and innovation (Graham, 1983).

Despite the importance of creativity to OT, the word “creativity” and the concept of creativity is conspicuously absent from the Occupational Therapy Practice Framework (OTPF). The word “creative” is only mentioned once, and located in an excerpt from Wilcock’s An Occupational Perspective of Health (AOTA, 2006, p. 652), referencing being creative as a factor in improved health and wellbeing. If creativity plays such a fundamental role in how occupational therapists successfully rehabilitate clients, then we should find the topic frequently discussed in OT literature, however, the opposite is true. Blanche (2007) expressed that although creativity is recognized as a powerful element,
the actual experience of creativity is rarely described in OT literature. The core of OT has been shifting in practice over the past decade, with intent to legitimate the profession through the “unquestioned acceptance of evidence based practice” (Hinojosa, 2013), which may lead to how creativity is utilized and reported. As stated in the centennial vision of the American Occupational Therapy Association (AOTA), the profession of OT seeks to be science driven and evidence-based (AOTA, 2008). As this current vision pushes therapy programs to effect measurable outcomes, the subjective aspects of arts and crafts have become de-emphasized (Thompson & Blair, 1998). The creative OT programs in the field of mental health, where these practices have traditionally been strong, are being replaced by structured discussion groups due to the lack of evidence for their efficacy, a trend that has continued since the 1970’s (Thompson & Blair, 1998). The changes to the profession in the effort to become more evidence based have only displaced the use of creative crafts, not rendered them ineffective. In fact, Holder (2001) argued that creative crafts remain an important facilitator of outcomes in physical as well as mental health settings, which continue to support the early findings of Yerxa showing that goal-directed activities such as crafts have advantages over straight exercise, and elicit neuromuscular responses that cannot be attained through other means (Yerxa, 1967). Creative acts such as arts and crafts, in everyday life, have been shown to bring about expressions of joy, improved sense of self-esteem, and enhancement in overall health, both mental and physical (Richards, 2006). If OT continues to emphasize focus exclusively on only that which can be measured, a core element of the profession that makes it unique will be lost. The holistic emphasis OT has that tailors treatment to the needs of the individual will then
vanish in a series of standardized evaluations, pre-determined interventions, and measurable treatments. For the practice of OT to retain its historical foundation and its ability to serve clients as individuals, the profession needs to find a way to embrace creativity in a manner that can be evaluated and measured, and embrace the value of creativity for its indefinable nature and contribution to the OT process.

**Background**

Creativity may mean different things in different contexts. The adjective form of the Oxford Online English Dictionary definition of the word creativity lists it as, “Having the quality of creating, able to create; of or relating to creation; originative” (Creativity, 2013). This definition aligns well with the principles of creativity found in OT literature, where it was found that creativity is regarded as a cognitive process resulting in an individual’s ability to think in terms that are unique and original as well as an individual's ability to problem solve (Edwards, 1979; Evans, 1991; Kielhofner, 2006). Creative thought is also conceptually associated with originality, intelligence, and intuition (Richards, 2006). Being creative, as opposed to creativity, is usually related to some display, act, or composition (Kielhofner, 2006), which may serve as a tangible influence upon the individual in terms of bringing meaning and purpose to one’s actions. The performance of creation has been linked to some aspects of the human condition such as joy, happiness, and freedom (La Cour et al., 2005). In these examples, a defining outline of creativity within the profession of occupational therapy begins to emerge from ambiguity.

One of the difficulties that arise when talking about creativity in OT, is that the literature references both the process of OT being a creative endeavor and the act of
creativity as a therapeutic tool, which are separate things. For the purpose of this paper the terms intrinsic or extrinsic will be used, where intrinsic creativity includes those properties inherent in one’s personality to problem solve, and extrinsic creativity is the process and product of creative action. OT as a creative profession utilizes both intrinsic and extrinsic properties of creativity in its process (Schmid, 2004). It also recognizes the qualities of being creative and their value for clients during therapeutic interventions (Thompson & Blair, 1998). Purposeful activity and the creation of the just-right challenge for the client transcend mere muscle movement, adding the advantage of motivating the client to complete a meaningful goal. With a creative hand, the therapist plays an integral part in promoting client volition, and engagement (Creek, 2007; Kielhofner, 1985).

However it is to be defined or utilized, Royeen (2003) states what many occupational therapists already know: “Creativity is the key to our art,” (p. 619).

Looking to acquire insight into the meaning of creativity in OT, Schmid (2004) convened a focus group of occupational therapists who had experience in the implementation of creative acts as interventions. She found multiple themes: creativity was a part of everyday life, it came in different forms, it integrated risk taking and problem solving, and for these actions to be successful, the occupational therapists reported the need for a supportive environment. The above findings by Schmid were limited by the lack of a definition of creativity and by not discriminating between extrinsic or intrinsic creativity. The themes uncovered by Schmid (2004) reflected only the opinion of occupational therapists and suggested extrinsic creativity. Graham (1983) pointed out that if creative problem solving were truly an inherent and valued aspect of OT, then it
would be reflected in the academic curriculum, not only as a consideration but even as an emphasis. Recognition of this importance is relayed within OT’s own 2006 accreditation standards, listed within section B of the Accreditation Council for Occupational Therapy Education (ACOTE) Standards and Interpretive Guidelines, stating that Doctoral degree, Masters degree and Occupational Therapy Assistant students will “be able to employ logical thinking, critical analysis, problem solving, and creativity (AOTA, 2006). So even in the educational standards, there is evidence of creativity’s importance to OT.

Much of the research on creativity has been published under the guise of problem solving and has been aimed at improving choices made in business, industry, and science (Evans, 1991; Kielhofner, 2006). While defining problem solving in this way reduces creativity to principles, it ultimately presents formulaic models intended to replicate the creative process that generates original thought.

Gluck, Ernst, and Unger (2002) found that those in inherently creative fields such as architecture and painting, when regarding product creation, considered the qualities of functioning, originality, and impression to be among the greatest influencing factors. Functioning qualities included the product’s physical elements and goal related achievement. The category of originality included all characteristics that made the product unique. Impressions as a category contained those qualities of the visual and conceptual aesthetic of a finished product.

La Cour et al. (2005) attempted to study the use of creative acts as therapy by interviewing both clients and occupational therapists after they had participated in multiple creative workshops. The clients in this study were occupants at a nursing home.
La Cour et al. (2005) stressed the importance of creative acts as a source of joy among the clients. Further coding of the interviews revealed the importance of socialization and the overall sense of connectedness one feels during creative acts. The freedom of engaging in the subjective act of creation without an expected outcome can activate one's mind and distract one from illness. Csikszentmihalyi (1996) has termed this phenomenon of being positively involved to the point of distraction, “flow.” It is a process of awareness that individuals experience when they become so absorbed in an activity that self-concern disappears altogether, leaving a deep sense of satisfaction. La Cour et al. (2005) described the importance of this process as becoming deeply engaged and losing track of time as a quality that gives respite from worries and illness. Some of the above studies considered creativity as a quality whose properties are ethereal and difficult to define (Gluck et al., 2002; Graham, 1983; Schmid, 2004).

Creativity is also viewed as an opposing force to rigor (Kielhofner, 2006). Increasing rigor in OT research is being equated with validity and is the means for developing an evidence-based practice. This is not unique to OT but present in fields as diverse as nursing, and design (Biggs & Buchler, 2007; Whittemore, Chase & Mandle, 2001). The basic argument is that, on the one side, if a discovery cannot be measured it does not contribute to science. The reciprocal side is that pure measurement of outcomes will cause stagnation as science replaces the component of discovery with measurable factors. In this argument, creativity is the contributing force behind discovery. In health professions the process of moving toward evidence-based practice may entail a loss of
consideration for the individual, as the human condition includes elements of both quality and quantity. Any research into the depths of creativity should contain both.

Thompson and Blair (1998) pointed out that the use of arts and crafts as a group intervention in mental health OT lacked quantitative support, and as an intervention, its use had been diminishing with the decline of psychodynamic theory. However, it is the subjective (non-quantifiable) nature of creative endeavors that produces the projective material necessary for therapeutic interpretation within the psychodynamic frame of reference, giving therapists invaluable information about the client.

Historically the intrinsic aspect of creativity has been studied in the realm of personality. In one of the first studies that attempted to quantify a quality of creativity, Barron (1955) documented what constitutes a creative person by evaluating how original his or her response was in a battery of projective tests. Barron was able to clearly show that some people are more creative than others. While, occupational therapists may have a different gauge for creativity, Barron’s study brings about the question “does being creative hold some benefit or advantage?” If we could foster this quality in therapists or our clients, would it benefit the field of occupational therapy?

Creativity, as it pertains to OT, is a broad concept. It seems that all aspects of the profession utilize a component of intrinsic or extrinsic creativity (Schmid, 2004). The importance of creativity to our field is undeniable yet there is little empirical data to support this claim. Creativity fills clients with joy and feelings of self-esteem (La Cour et al., 2005), and it enables the solution of unique problems (Graham, 1983). Without creativity we lose the element of discovery, which produces growth and furthers
science (Whittemore et al., 2001). By enforcing only rigor in our standards and in our treatments we also lose the ability to look at the unique needs of individuals. Finding this balance between humanity and science has been at the philosophical center of OT since its inception (Reilly, 1962). In order to keep the act of creativity in OT, as well as to maintain the practice of OT as a creative act, the meaning and place of creativity should be more closely evaluated and its importance to the profession formally recognized. Fundamental perspectives and opinions of contemporary practitioners about creativity constitute a starting point for the re-conceptualization of creativity within the field. Therefore, the purpose of this study was to learn how occupational therapists defined creativity, to document therapist-reported use of “creativity” in a variety of OT practice settings, and to determine their opinion as to its importance to the field.

**Method**

**Research Design**

With such a large and diverse population of occupational therapists in the U.S., it was determined that a descriptive study consisting of a mailed survey would be the best means of examining this topic. This method also employs a format that protects confidentiality, thereby encouraging authentic answers. A potential confound is that the survey format may disrupt the subtle qualitative aspects found in more reflective methods such as interview, by forcing a determined structure over the topic of creativity. Sequencing of questions within the survey may have influenced participant response, limiting the therapist’s ability to reflect freely on the subject. Thus the survey also
included two open-ended questions in an attempt to elicit data that was not confined by the survey questions, in the hope of gaining unexpected insights into the field.

Participants

The desired sample would reflect a proportional distribution of occupational therapists across all practice settings in the U.S. Participants for the current study were obtained via systematic random sample of all non-student members of AOTA. Although AOTA members reflect only a portion of occupational therapists in the U.S., this sample was expected to provide a fair representation of practice realms. Funding limited the number of potential participants to 250.

Instrumentation

A survey (see Appendix) consisted of an eight-page, four-section, questionnaire booklet that was created with design influence provided by How to Conduct your Own Survey (Salant & Dillman, 1994). Six demographic questions asked gender, length of time in current practice setting, length of time as an occupational therapist, highest degree obtained, specific practice realm, and highest degree obtained within OT. Practice realms are those defined by AOTA: children and youth, health and wellness, mental health, productive aging, rehabilitation (including disability and participation), and work and industry (AOTA, 2012). The category of “other” was included as appropriate, for areas that were not otherwise represented. The ideas that provided the content of the survey about creativity in OT were revealed through the background research and the process of OT as dictated by the OTPF (AOTA, 2008), which provided both a construct and a conceptual framework for the statement rating section (see Table 3 and Appendix survey
statements 8-27). The OT process topics included questions regarding therapeutic process, outcomes, creating an occupational profile, establishing a client-therapist relationship, the selection and interpretation of assessments, the use of skilled observation, and the formulation and adjustment of the treatment plan (pp. 646-660).

The other statements used for rating in the survey involved professional creativity inquiries pointing toward how therapists feel about their relationship to creativity in their specific place of work and in relation to other professions. The word associations were taken directly from the themes uncovered in the literature review (Table 4). Two open-ended questions captured written reflections on the personal definition of creativity, and the respondent’s perception on when they are most creative as an occupational therapist.

As with any new survey the reliability and validity of the instrument were unknown.

**Procedures**

The university Institutional Review Board received and approved the study. The content of the survey was composed from background research and reviewed by the research project chair. A pilot of the survey materials was tested with six OT graduate students and six OT program faculty members to assess its clarity and ease of use. Feedback from the pilot was used to edit questions and statements, as well as to approximate the time it took to complete the survey.

Survey packets consisting of a cover letter with a description of the study purpose, the official survey, and a prepaid business reply envelope, were sent to participants. The return envelopes were coded with a three-digit number, from 001 to 250, that corresponded to a second identically numbered set of labels reserved for the second
mailing. Return envelopes were marked with a unique ink stamp to differentiate respondents' returned surveys from other university mail. Mailing labels were kept in a locked cabinet in a limited access room at the university until used. To maintain confidentiality, the names of participants and their three digit codes were not on the survey form. Returned surveys were first removed from the return envelope, the three-digit number on the envelope was matched with its corresponding second mailing label, and then both envelope and secondary label were destroyed. The intended second survey mailing was withheld due to time limitations. All mailing labels were destroyed to maintain confidentiality. At six weeks after the initial mailing date, data collection was concluded.

Data Analysis

Data were entered into the Statistical Package for Social Sciences version 19 (SPSS). Descriptive statistics for mean, frequency, percent, standard deviation, and range, were calculated on demographics and content response variables, to provide a general profile of current attitudes, practices, and opinions about creativity. A two-tailed Pearson correlation matrix was generated between all pairs of variables. Differences among demographic data were examined, and associations between certain paired variables were calculated using tabulation and chi-square analysis. Word frequency analysis using Text Analyzer from Online-Utility.org (Adamovic, 2006) was used for the question, “What is your definition of creativity.” Theme categorization was employed for the question, “As an occupational therapist, when are you most creative?” to explore patterns within their content.
Results

Response Rate

A total of 73 surveys were returned to the investigators, from the original 250 mailed surveys. Three were returned by the post office as undeliverable, and destroyed. Five of the remaining 70 surveys had some missing data, however, portions were still usable. The result was a total of 70 admissible surveys, yielding a final response rate of 28.3%.

Respondent Demographics

All occupational therapists surveyed in the study were part of a U.S. national sample. A plurality of respondents (44.3%) reported working in the realm, children and youth (see Table 1). The respondents who reported “other” as their category, listed infant/toddlers, recently retired, home health care, acute health care, etc.; academic teaching; hand therapy; home modifications; private practice; and early intervention. These responses were redistributed to practice realms one through six if applicable. The redistributed data is reflected in Table 1.

For all practice settings combined, respondents’ number of years worked as an occupational therapist ranged from 0 – 35+ years (median, 16 – 20 yrs. category). Length of time in current practice setting also varied from 0 – 35+ years (median, 11 – 15 yrs. category) (see Table 2). Sixty-two females (92.5%) and five males (7.5%) responded to the survey (three respondents did not answer that question). These data reflect the gender distribution across AOTA members (AOTA, 2010).
For the highest educational degree earned, there were two who held a clinical doctorate (3% of responses); 39 (59%) who held a master’s degree, and 25 (37.9%) who held a bachelor’s degree. No respondents reported having earned a PhD. For the highest OT degree earned, there were two who held a clinical doctorate (3.1%); 32 (49.2%) who held a master’s degree (MOT/MSOT/MAOT); 31 (47.7%) who held a bachelor’s degree (BA/BS).

**Scaled Response Ratings**

The statement rating portion of the survey was comprised of 20 ten-point Likert scale questions about how occupational therapists view creativity in relation to the occupational process, as well as in their place of work. Descriptive statistics summarizing response data are summarized in Table 3.

The word association portion of the survey was presented as 23 words next to a ten-point Likert scale, where respondents rated the level of association each word has with creativity. Descriptive statistics summarizing the data are listed in Table 4.

Cross tabulation and chi-square analysis were run on selected demographic data to determine if significant relationships existed between the demographic data and statement rating and word association data. Practice settings and highest OT degree were chosen for demographic comparison testing. The practice realms, children and youth, and rehabilitation were selected as most relevant, as they comprised 84.3% of the total sample. Children and youth, and rehabilitation, were cross tabulated with all response questionnaire and word association data. Two significant relationships were found at the alpha = .10 significance level. “Creativity is important for skilled clinical observation,”
The nature of creativity

$X^2(10, N = 59) = 16.9, p = .076$, displays a heavier comparative response for children and youth in the 8 – 10 rating range compared to a relatively denser rating in the 4 – 6 range for rehabilitation. The significant difference in the statement “Creativity is not encouraged in my place of work,” $X^2(8, N = 59) = 14.0, p = .082$, primarily comes from a high count of “0” scale scores for children and youth (16), compared to rehabilitation (5). Significant word associations were found for three words (alpha = .10), “imagination,” $X^2(4, N = 59) = 14.1, p = .007$; “versatility,” $X^2(4, N = 58) = 12.4, p = .014$; and “problem solving” $X^2(5, N = 58) = 10.0, p = .075$. Children and youth respondents showed a high degree of “10” ratings for all three words, creating the significant finding compared to rehabilitation rankings. When these same data were run to search for significant relationships comparing bachelor’s and master’s for highest education levels, two significant relationships (alpha = .10) occurred: “production/productivity,” $X^2(10, N = 64) = 16.51, p = .086$; and “discovery,” $X^2(5, N = 64) = 10.80, p = .056$. The significant difference for “production/productivity,” was reflected in bachelor’s degree holder overall high ratings of 8 - 10 (44%) than for master’s degree holder ratings (25.6%). The absence of bachelor’s degree holder scores in the 0 - 2 range distributed a higher number of responses to the middle and upper scale compared with Master’s degree scores. An interesting similarity for “discovery,” was reflected in the responses of all bachelor’s and master’s degree holders’ scores being exclusive to the upper end of the scale (5 – 10). Additionally, a higher degree of Bachelor’s degree holders (44%), marked “10” as a response, compared to Master’s degree holders (25.6%).
In the “time worked” demographic, the fields representing “0 - 5 years” of experience, and “over 35 years” of experience, had the frequency $n = 11$ (15.7%), representing a total 31.4% of all eight category responses. Cross tabulation and chi-square analysis resulted in three significant values at alpha = .10. The statement response, “Creativity is more important in occupational therapy than in other health professions,” yielded $X^2(6, N = 22) = 16.0, p = .014$; and word association for “problem solving,” returned $X^2(3, N = 22) = 12.4, p = .006$. Results for “research,” were moderately significant, $X^2(7, N = 22) = 13.9, p = .054$. Occupational therapists working from 0 – 5 years, had zero responses in the 8 – 10 range, compared to nine (81.8%) from occupational therapists working over 35 years, establishing a significant difference in responses to, “Creativity is more important in occupational therapy than in other health professions.” This clearly reflects the opinion that creativity holds greater importance to OT by veteran therapists. Similarly, 81.8% of occupational therapists in the 35+ years category answered “10” to “problem solving” being strongly associated with creativity, opposed to one response (9.1%) from therapists working 0 – 5 years. Although all respondents in both categories scored in the 7 – 10 range for “problem solving,” those therapists with the most experience indicated this association most strongly. For the “research” word association, there were no scores returned with a rating of “10.” Occupational therapists in the time worked category of 0 – 5 years also had zero scores in the 8 – 9 range, whereas responses for the same range for those occupational therapists with 35+ years of experience were six (55%). The difference reflects the likelihood for
more experienced occupational therapists to rate research positively with creativity, compared to their newer colleagues.

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Various significantly correlated relationships were found at the alpha = .001 significance level within the statement ranking responses, as well as within word association responses. The statement “Creativity is an important part of the therapeutic process,” was highly correlated with two other statements: “Creativity is vital to the field of occupational therapy” ($r(67) = .706, p < .001$), and “Being an occupational therapist requires creativity in everyday practice” ($r(67) = .604, p < .001$). The statement, “Creativity is used in establishing a client occupational profile,” correlated highly with three statements, “Creativity is important in the evaluation of a client” ($r(67) = .544, p < .001$), “Creativity is used in the selection of assessments” ($r(67) = .528, p < .001$), and “Being an OT has made me more creative” ($r(66) = .508, p < .001$). The responses, “Creativity is important in the evaluation of a client,” and “Creativity is used in the selection of assessments” ($r(67) = .599, p < .001$), were additionally highly correlated with
each other, displaying a likelihood of respondents to respond similarly to these two statements. “Happiness,” and “Joy” \( r(66) = .677, p < .001 \), was the most highly correlated pairing of word associations, however “Intelligence” was highly correlated with both “Skill” \( r(68) = .669, p < .001 \), and “Wisdom” \( r(68) = .642, p < .001 \).

“Production/Productivity,” was notably correlated highly with three other words: “Skill” \( r(69) = .653, p < .001 \), “Experience” \( r(68) = .577, p < .001 \), and “Research” \( r(69) = .552, p < .001 \), showing that respondents who associated a higher degree of creativity with the words “Production/Productivity, also tended to associate a higher degree of creativity with each of the words, “Skill,” “Experience,” and “Research.” “Problem Solving,” was highly correlated with, “Versatility” \( r(69) = .637, p < .001 \), and “Ingenuity” \( r(66) = .579, p < .001 \). In comparing statement response and word association data, the pairing of “Experience,” with, “Creativity is used in establishing a client occupational profile,” was the most highly significant correlation \( r(67) = .609, p < .001 \), establishing that those who associate creativity more highly with “Experience,” also agreed more strongly with the statement that “Creativity is used in establishing a client occupational profile.”

**Open-Ended Responses**

The first open-ended question asked the respondent to provide her/his own definition of creativity. Due to the variety and complexity of some definitions written for this question, many responses could not be coded into individual themes. All entries were compiled, and a list of words was created using the online word frequency program Text Analyzer (Adamovic, 2006). After a total frequency analysis was performed, articles,
prepositions, conjunctions, and pronouns were excluded. Any of the six words from the question itself, “What is your definition of creativity” were also excluded from analysis as well as those from the phrase “thinking outside of the box” or a very close variant which occurred in 26% of the responses. Word frequencies that occurred fewer than six times were not considered important. Words that had multiple synonymous derivatives were combined for counting. The top responses in descending order of frequency were, “Ability, Using, New, Make, Something, Solution, Ideas, Ways, and Problem,” (see Table 5).

The second open-ended question that asked, “As an occupational therapist, when are you most creative?” created a multitude of answers that were categorized into seven reoccurring themes, with each response being assigned to one, most relevant, theme. The most prevalent theme recorded was “Treatment planning and adjustment” comprising 28.6% of the respondent answers, followed by “Difficulty or challenging situations” (21.4%), and “Problem solving” (14.3%) (see Table 6).

Discussion

The participants of the study (N = 70) had a median category time of 16 - 20 years of time worked in OT, however, there was a distinct bipolar separation noted. Over 88.6% of the participants were either grouped into the first three response categories (Range = 0 to 15 yrs., 44.6%) or the last three response categories (Range = 26 to 35+, 40%), leaving a gap in the middle age segment of 16 – 25 years. The practice realm data showed a heavy predominance in two areas, Children and Youth (n = 31; 44.3%), and Rehabilitation (n = 28; 40.0%), together comprising 84.3% of all responses. Therapists’ responses to statement associations were overall very high, especially in relation to the importance of
creativity to the therapeutic process and treatment planning and outcomes. Only the mean score for, “Creativity is used to interpret data for assessments” ($M = 4.43$) effectively reflected a mean score that was less than “neutral” on the Likert scale (5.0). Answers for all responses of the top two statement associations, “Creativity is an important part of the therapeutic process” ($M = 8.96$), and “Creativity is vital to the field of occupational therapy” ($M = 8.94$) were within the range of $4 – 10$. An absence of low-end responses indicated strong agreement by all participants that creativity is important to the therapeutic process, as well as vital to the field of OT. These strong positive associations display a tendency within participant views to link creativity with the client, the treatment process, and the field of OT, up through the entire profession.

The response to the question “What is your definition of creativity” created a hierarchy of answers that alluded to a greater importance of creativity within the practice of OT. The most frequently occurring word, “Ability,” indicates that creativity in OT is a facilitating factor, and combining it with the other highest frequency words, “Using, New, Make, Something, Solution, Ideas, Ways, and Problem” can be structured to create the sentence “Using new ideas and ways to problem solve something.” This statement has a striking resemblance to the OT treatment process, which gives the occupational therapist the “Ability” to create change. The Oxford English Online Dictionary definition listed above also centers around the principle of being able. Similarly, “thinking outside of the box,” was a common answer (26%) to the question, “What is your definition of creativity?” The common occurrence of this response may be an indicator that occupational therapists view their role as reaching beyond “typical” requirements of creativity in the workplace.
It may also be an indicator of which type of person may be drawn to the “creativity” within the field of OT. The second open ended question, “As an occupational therapist, when are you most creative?” gave rise to the themes in Table 6. The most frequently occurring theme reflects a belief by occupational therapists that they are most creative during the treatment process, both in planning and in its ongoing adjustment. The next two most frequently occurring themes were “Difficulty or challenging situations,” and “Problem Solving,” indicating creativity in the face of practice dilemmas. The remaining themes “Client interactions, Physical/environmental adaptation, Use of time and resources, and Team collaboration,” in combination with the other themes, encompass much of the OT process, suggesting that creativity may be present in all areas of OT.

**Implications for Occupational Therapy**

The results of this survey clearly reflect the importance of creativity to the practice of OT among the respondents, yet creativity is barely recognized or documented as part of our contemporary doctrine. Perhaps future research could provide guidance to the governing bodies of the profession to formally recognize the importance of creativity to the profession of OT.

With evidence based practice as the driving force to produce measurable and data driven outcomes, it will be interesting to see how creativity fits into such a structured role. With occupational therapists relaying that creativity is an important aspect in treatment planning and process, finding the degree that creativity contributes to these measurable outcomes may be a future step in determining its value to the profession.
Limitations

In the demographics portion of the survey, clinical doctorate (OTD) was listed for both question five (highest level of OT education) and question six (highest level of education). Also of educational note, the absence of response from participants with PhD level education is a demographic limitation that may have influenced ratings and interpretations. As clinicians with PhD level education reflect a small percentage of occupational therapists, the lack of any inclusion should not have greatly affected responses, though. A more in-depth study of how education levels influence opinions of creativity within OT would help clarify this matter.

The inclusion of qualitative data in the survey introduces another method of interpretation of data, introducing the possibility of researcher bias in selection of words for frequency, as well as in the interpretation of respondent information.

The strong response from therapists in the realm of Children and Youth has a high degree of influence on the results due to its size ($n = 31, 44.3\%$). AOTA categorizes Children and Youth as a major practice realm, however, available literature does not reflect this category, and specific information on the proportion of AOTA members working in each realm could not be found. By approximating a representative total of children and youth by combining practice areas of schools and early intervention (AOTA, 2010), an estimated $26.4\%$ total was formulated. This total represents an $11.3\%$ smaller representation, indicating that a disproportionately large number of current survey respondents worked in pediatrics.
In many of the Likert statements the sample responded with a high degree of variation. It is difficult to say whether this variation was due to passionate disagreement about a subject, misinterpretation of the statement or question, or possibly an ambiguous response to an uninspiring statement.

It is also worth noting that the frequency of “Thinking outside of the box” responses to question #7 may be due to an unintended influence from the “answer box” that was provided for participants to write in.

**Future Research**

With such variability in the literature over the role that creativity can play, how are occupational therapists able to understand clients’ needs and then draw upon their own skills of problem solving in a therapeutic way to help the clients move forward, and is creativity an essential component of this process?

This study begins to dissect the, “what,” “where,” and “when,” factors of creativity in OT, and the views and opinions that occupational therapists in various practice settings have regarding it. Research into OT education and whether it reflects the importance of creativity by directly applying the principles of originative problem solving in coursework would create insight as to how students are being prepared for a profession that specifically values these attributes. Furthermore, the ability to gauge how one’s internal views of personal creativity reflect upon external views in the profession might lead to interesting discoveries. By including the statement, “I am a creative person,” into subsequent surveys, respondents would provide a point of correlation to measure scoring similarities compared to others; in essence applying Barron’s (1955) original ideas about
creativity and asking whether creative people respond similarly. Inferences could then be made about those occupational therapists who believe they are or are not creative and where they rank their creative use the highest. It would also be interesting to relate these factors to the amount of variance produced in responses. Creativity as an element experienced by clients and the therapeutic value this may bring is still largely unstudied and will require much research as to whether it actually fosters health or facilitates participation in the form of motivation. In this respect, it would aid future research to separate intrinsic and extrinsic creativity when conducting research, reducing complication between client and therapist uses of creativity, and removing arts and crafts from the equation. This complication arose from the discussion of therapist values in the literature. It is our recommendation that further study be conducted in more detail to determine the impact creativity has on occupational therapists in practice, and on the profession as a whole. Do occupational therapists use creativity to create wellness in clients or do they promote clients’ ability to create this in themselves, or both?

Conclusion

In this attempt to collect both quantitative and qualitative data to discover the ideas and use of creativity by occupational therapists in varying practice settings, we had hoped to uncover where creativity was being utilized within the profession of OT. Through the collected data, and descriptive statistics rendered, it is apparent that there is no “one answer,” but rather a multitude of answers depending upon the client, the therapist, and the situation. However, if we combine the qualitative and quantitative data with an emphasis on recurring themes we can make the statement “Problem solving gives
us the ability to create better outcomes through the use of imagination and originality to adjust treatment planning in a challenging situation.” Creativity will continue to be a force in occupational therapy. It is a tool as well as a process. It is the origin of our profession and its means. Recognition of the creative aspect of OT will further validate our profession and give it distinctiveness.
References


Creativity & Occupational Therapy

1. How long have you worked as an occupational therapist?  
(Please circle the number of your response.)

   1. 0 - 5 YEARS  
   2. 6 - 10 YEARS  
   3. 11 - 15 YEARS  
   4. 16 - 20 YEARS  
   5. 21 - 25 YEARS  
   6. 26 - 30 YEARS  
   7. 31 - 35 YEARS  
   8. OVER 35 YEARS

2. In which occupational therapy practice setting do you currently work?  
(Please circle the number of your response.)

   1. CHILDREN & YOUTH  
   2. HEALTH & WELLNESS  
   3. MENTAL HEALTH  
   4. PRODUCTIVE AGING  
   5. REHABILITATION  
   6. WORK & INDUSTRY  
   7. OTHER (PLEASE SPECIFY) __________________________

3. How long have you worked in your current practice setting?  
(Please circle the number of your response.)

   1. 0 - 5 YEARS  
   2. 6 - 10 YEARS  
   3. 11 - 15 YEARS  
   4. 16 - 20 YEARS  
   5. 21 - 25 YEARS  
   6. 26 - 30 YEARS  
   7. 31 - 35 YEARS  
   8. OVER 35 YEARS
4. What is your gender:
(Please circle the number of your response.)

1. FEMALE
2. MALE
3. OTHER

5. What is your highest occupational therapy degree earned?
(Please circle the number of your response.)

1. BACHELOR’S DEGREE (BA/BS)
2. MASTER’S (MOT/MSOT/MAOT)
3. CLINICAL DOCTORATE (OTD)
4. DOCTOR OF PHILOSOPHY (PHD)
5. OTHER (PLEASE SPECIFY)____________________________

6. What is your highest level of education?
(Please circle the number of your response.)

1. BACHELOR’S DEGREE
2. MASTER’S DEGREE
3. CLINICAL DOCTORATE (OTD)
4. DOCTOR OF PHILOSOPHY (PHD)
5. OTHER (PLEASE SPECIFY)____________________________

In your own words please answer the following question within the box provided below.

7. What is your definition of creativity?
### The Nature of Creativity

Please rate the following questions using the scale shown below. [Please circle the number of your response.]

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>← strongly disagree</td>
<td>neutral</td>
<td>strongly agree →</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Being an occupational therapist requires creativity in everyday practice.  
   - 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

9. Creativity is an important part of the therapeutic process.  
   - 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

10. Creativity is vital to the field of occupational therapy.  
    - 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

11. The field of occupational therapy is becoming less creative.  
    - 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

12. Creativity in occupational therapy fosters better outcomes.  
    - 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

13. Being an OT has made me more creative.  
    - 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

14. Creativity is used in establishing a client occupational profile.  
    - 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

15. Creativity plays a crucial role in the client-therapist relationship.  
    - 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

16. Creativity is important in the evaluation of a client.  
    - 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

17. Creativity is used in the selection of assessments.  
    - 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10
Please rate the following questions using the scale shown below.
[Please circle the number of your response.]

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
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<td>neutral</td>
<td>strongly agree</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. Creativity is used to interpret data from assessments.
   0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

19. Creativity is important for skilled clinical observation.
   0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

20. Creativity is important in the formulation of a treatment/intervention plan.
   0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

21. Creativity is used to adjust a treatment plan.
   0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

22. Creativity is not encouraged in my place of work.
   0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

23. Being creative is a requirement for every occupational therapist.
   0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

24. All therapy professions (Psychology, Occupational Therapy, Psychiatry, Physical Therapy, etc.) require the use of creativity.
   0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

25. Being creative comes naturally to me.
   0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

26. Creativity is more important in occupational therapy than in other health professions.
   0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

27. I would like to be allowed to be more creative in my OT work.
   0 - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10
FOR THE FOLLOWING SECTION:

Please rate the level of association you feel these words have with creativity, according to your personal opinion, from no association to strong association. [Please circle the number of your response.]

0 1 2 3 4 5 6 7 8 9 10
< no association  strong association >

28. ARTS & CRAFTS
   0 1 2 3 4 5 6 7 8 9 10

29. CLEVERNESS
   0 1 2 3 4 5 6 7 8 9 10

30. DISCOVERY
   0 1 2 3 4 5 6 7 8 9 10

31. EXPERIENCE
   0 1 2 3 4 5 6 7 8 9 10

32. GENIUS
   0 1 2 3 4 5 6 7 8 9 10

33. HAPPINESS
   0 1 2 3 4 5 6 7 8 9 10

34. IMAGINATION
   0 1 2 3 4 5 6 7 8 9 10

35. INGENUITY
   0 1 2 3 4 5 6 7 8 9 10

36. INSIGHT
   0 1 2 3 4 5 6 7 8 9 10

37. INTELLIGENCE
   0 1 2 3 4 5 6 7 8 9 10
Please rate the level of association you feel these words have with creativity, according to your personal opinion, from no association to strong association.

[Please circle the number of your response.]

38. JOY
0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

39. OPEN-MINDEDNESS
0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

40. ORIGINALITY
0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

41. PERSONALITY
0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

42. PLAY
0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

43. POTENTIAL
0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

44. PROBLEM SOLVING
0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

45. PRODUCTION/PRODUCTIVITY
0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

46. RESEARCH
0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

47. SKILL
0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10
Please rate the level of association you feel these words have with *creativity*, according to your personal opinion, from no association to strong association.

[Please circle the number of your response.]

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>← no association</td>
<td>strong association →</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

48. SPONTANEITY

0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

49. VERSATILITY

0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

50. WISDOM

0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10

[PLEASE CONTINUE TO THE NEXT PAGE]
In your own words please answer the following question within the box provided below.

51. As an occupational therapist, when are you most creative?

Thank you for completing our survey.

Please enclose this survey in the provided self-addressed business reply envelope and mail it at your earliest convenience. We value your time and effort, and sincerely thank you for your contribution.

Chris Ernst, OTS  Andrew Moore, OTS  George Tomlin, PhD, OTR/L

University of Puget Sound
School of Occupational Therapy
1500 N. Warner St. CMB1070
Tacoma, WA 98416
Table 1

*Practice Realms of Survey Respondents (N = 70)*

<table>
<thead>
<tr>
<th>Realm</th>
<th>n</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children and Youth</td>
<td>31</td>
<td>(44.3%)</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>28</td>
<td>(40.0%)</td>
</tr>
<tr>
<td>Productive Aging</td>
<td>4</td>
<td>(5.7%)</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>(5.7%)</td>
</tr>
<tr>
<td>Mental Health</td>
<td>2</td>
<td>(2.9%)</td>
</tr>
<tr>
<td>Health and Wellness</td>
<td>1</td>
<td>(1.4%)</td>
</tr>
<tr>
<td>Work and Industry</td>
<td>0</td>
<td>(0%)</td>
</tr>
</tbody>
</table>
### Table 2

*Time Worked in OT and Practice Realm (N = 70)*

<table>
<thead>
<tr>
<th>Time Worked</th>
<th>Years in OT</th>
<th>Years in Current Realm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$ (%)</td>
<td>$n$ (%)</td>
</tr>
<tr>
<td>0 – 5 Years</td>
<td>11 (15.7%)</td>
<td>19 (27.1%)</td>
</tr>
<tr>
<td>6 –10 Years</td>
<td>10 (14.3%)</td>
<td>16 (22.9%)</td>
</tr>
<tr>
<td>11 – 15 Years</td>
<td>13 (18.6%)</td>
<td>15 (21.4%)</td>
</tr>
<tr>
<td>16 – 20 Years</td>
<td>4 (5.7%)</td>
<td>9 (12.9%)</td>
</tr>
<tr>
<td>21 – 25 Years</td>
<td>4 (5.7%)</td>
<td>4 (5.7%)</td>
</tr>
<tr>
<td>26 – 30 Years</td>
<td>8 (11.4%)</td>
<td>1 (1.4%)</td>
</tr>
<tr>
<td>31 – 35 Years</td>
<td>9 (12.9%)</td>
<td>3 (4.3%)</td>
</tr>
<tr>
<td>Over 35 Years</td>
<td>11 (15.7%)</td>
<td>3 (4.3%)</td>
</tr>
</tbody>
</table>
Table 3

**Statement Associations**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity is an important part of the therapeutic process.</td>
<td>8.96</td>
<td>1.272</td>
<td>4-10</td>
</tr>
<tr>
<td>Creativity is vital to the field of occupational therapy.</td>
<td>8.94</td>
<td>1.313</td>
<td>5-10</td>
</tr>
<tr>
<td>Being an occupational therapist requires creativity in everyday practice.</td>
<td>8.67</td>
<td>1.618</td>
<td>1-10</td>
</tr>
<tr>
<td>Creativity in occupational therapy fosters better outcomes.</td>
<td>8.66</td>
<td>1.472</td>
<td>5-10</td>
</tr>
<tr>
<td>Creativity is used to adjust a treatment plan.</td>
<td>8.59</td>
<td>1.367</td>
<td>5-10</td>
</tr>
<tr>
<td>Creativity is important in the formulation of a treatment/intervention plan.</td>
<td>8.54</td>
<td>1.451</td>
<td>4-10</td>
</tr>
<tr>
<td>Being creative is a requirement for every occupational therapist.</td>
<td>7.99</td>
<td>1.922</td>
<td>2-10</td>
</tr>
<tr>
<td>Being creative comes naturally to me.</td>
<td>7.80</td>
<td>1.725</td>
<td>4-10</td>
</tr>
<tr>
<td>Creativity plays a crucial role in the client-therapist relationship.</td>
<td>7.70</td>
<td>1.723</td>
<td>3-10</td>
</tr>
<tr>
<td>Being an OT has made me more creative.</td>
<td>7.32</td>
<td>2.241</td>
<td>0-10</td>
</tr>
<tr>
<td>All therapy professions (Psychology, Occupational Therapy, Psychiatry, Physical Therapy, etc.) require the use of creativity.</td>
<td>7.04</td>
<td>2.245</td>
<td>0-10</td>
</tr>
<tr>
<td>Creativity is used in establishing a client occupational profile.</td>
<td>6.81</td>
<td>2.002</td>
<td>0-10</td>
</tr>
<tr>
<td>Creativity is more important in occupational therapy than in other health professions</td>
<td>6.77</td>
<td>2.058</td>
<td>2-10</td>
</tr>
<tr>
<td>Creativity is important in the evaluation of a client.</td>
<td>6.40</td>
<td>2.412</td>
<td>0-10</td>
</tr>
<tr>
<td>Creativity is important for skilled clinical observation.</td>
<td>6.07</td>
<td>2.634</td>
<td>0-10</td>
</tr>
<tr>
<td>Creativity is used in the selection of assessments.</td>
<td>5.81</td>
<td>2.141</td>
<td>0-10</td>
</tr>
<tr>
<td>The field of occupational therapy is becoming less creative.</td>
<td>5.58</td>
<td>2.418</td>
<td>0-10</td>
</tr>
<tr>
<td>I would like to be allowed to be more creative in my OT work.</td>
<td>5.21</td>
<td>2.664</td>
<td>0-10</td>
</tr>
<tr>
<td>Creativity is used to interpret data from assessments.</td>
<td>4.43</td>
<td>2.405</td>
<td>0-10</td>
</tr>
<tr>
<td>Creativity is not encouraged in my place of work.</td>
<td>2.16</td>
<td>2.338</td>
<td>0-10</td>
</tr>
</tbody>
</table>

*Note:* Respondents were asked to rate each statement on a scale of 0-10, where 0=strongly disagree and 10 = strongly agree.
Table 4

*Word association with “creativity”*

<table>
<thead>
<tr>
<th>Word</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imagination</td>
<td>9.27</td>
<td>1.329</td>
<td>1-10</td>
</tr>
<tr>
<td>Ingenuity</td>
<td>9.10</td>
<td>1.283</td>
<td>3-10</td>
</tr>
<tr>
<td>Originality</td>
<td>8.86</td>
<td>1.508</td>
<td>1-10</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>8.84</td>
<td>1.313</td>
<td>3-10</td>
</tr>
<tr>
<td>Versatility</td>
<td>8.70</td>
<td>1.154</td>
<td>6-10</td>
</tr>
<tr>
<td>Discovery</td>
<td>8.46</td>
<td>1.501</td>
<td>4-10</td>
</tr>
<tr>
<td>Cleverness</td>
<td>8.30</td>
<td>1.683</td>
<td>1-10</td>
</tr>
<tr>
<td>Open Mindedness</td>
<td>8.28</td>
<td>1.392</td>
<td>5-10</td>
</tr>
<tr>
<td>Play</td>
<td>8.23</td>
<td>1.637</td>
<td>3-10</td>
</tr>
<tr>
<td>Insight</td>
<td>8.16</td>
<td>1.542</td>
<td>3-10</td>
</tr>
<tr>
<td>Arts/Crafts</td>
<td>8.10</td>
<td>2.044</td>
<td>2-10</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>8.00</td>
<td>1.855</td>
<td>0-10</td>
</tr>
<tr>
<td>Happiness</td>
<td>7.61</td>
<td>1.767</td>
<td>2-10</td>
</tr>
<tr>
<td>Experience</td>
<td>7.14</td>
<td>2.151</td>
<td>0-10</td>
</tr>
<tr>
<td>Personality</td>
<td>7.06</td>
<td>1.999</td>
<td>3-10</td>
</tr>
<tr>
<td>Potential</td>
<td>7.10</td>
<td>2.101</td>
<td>1-10</td>
</tr>
<tr>
<td>Joy</td>
<td>7.09</td>
<td>1.968</td>
<td>3-10</td>
</tr>
<tr>
<td>Wisdom</td>
<td>6.70</td>
<td>1.865</td>
<td>0-10</td>
</tr>
<tr>
<td>Intelligence</td>
<td>6.41</td>
<td>2.284</td>
<td>0-10</td>
</tr>
<tr>
<td>Skill</td>
<td>6.46</td>
<td>2.298</td>
<td>0-10</td>
</tr>
<tr>
<td>Genius</td>
<td>6.50</td>
<td>2.339</td>
<td>0-10</td>
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<tr>
<td>Production/Productivity</td>
<td>6.29</td>
<td>2.163</td>
<td>0-10</td>
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<tr>
<td>Research</td>
<td>6.20</td>
<td>2.227</td>
<td>0-10</td>
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</table>

*Note: Respondents were asked to rate each word’s association with creativity on a scale of 0-10 where 0 = no association and 10 = strong association.*
### Table 5

**Word Frequencies**

<table>
<thead>
<tr>
<th>Word</th>
<th>Frequency</th>
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<tr>
<td>Ability*</td>
<td>29</td>
</tr>
<tr>
<td>Using*</td>
<td>26</td>
</tr>
<tr>
<td>New</td>
<td>24</td>
</tr>
<tr>
<td>Way*</td>
<td>20</td>
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<tr>
<td>Make</td>
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<td>Something</td>
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<td>Solution*</td>
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<tr>
<td>Imagination</td>
<td>6</td>
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<tr>
<td>Work</td>
<td>6</td>
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</tbody>
</table>

*Note. Table data represent highest frequency of occurred words in all of respondents’ definitions of creativity. * Denotes words that had more than one derivative and were combined in count.*
Table 6

“When Are You Most Creative” Themes (N = 70)

<table>
<thead>
<tr>
<th>Themes</th>
<th>n</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment planning and adjustment</td>
<td>20</td>
<td>(28.6%)</td>
</tr>
<tr>
<td>Difficulty or challenging situations</td>
<td>15</td>
<td>(21.4%)</td>
</tr>
<tr>
<td>Problem solving</td>
<td>10</td>
<td>(14.3%)</td>
</tr>
<tr>
<td>Client interactions</td>
<td>8</td>
<td>(11.4%)</td>
</tr>
<tr>
<td>Physical/environmental adaptation</td>
<td>8</td>
<td>(11.4%)</td>
</tr>
<tr>
<td>Use of time and resources</td>
<td>6</td>
<td>(8.6%)</td>
</tr>
<tr>
<td>Team collaboration</td>
<td>3</td>
<td>(4%)</td>
</tr>
</tbody>
</table>

*Note: Themes were coded from a respondent reply to “As an occupational therapist when are you most creative?”. 