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**| RESEARCH ARTICLE**

## **Brainstorming: The Need for Professionalization of Facilitators and Participants.**

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**| ABSTRACT**

Brainstorming is an old and widely used process designed to help organizations generate ideas. It has not changed much since its introduction in 1953, and the general consensus today is that, more often than not, it does not produce satisfactory results. This paper examines why that is so and what can be done to improve the brainstorming process. The authors believe that the recommendations put forward here represent a significant modification, not only to the brainstorming process but to the way organizations need to approach and organize their brainstorming sessions. The paper challenges long standing practices and assumptions regarding brainstorming. The authors conclude, after conducting their own primary research with brainstorming participant groups, that two of the four guidelines which creator Alex Osborn originally specified are beyond the expertise of most brainstorming group participants and require specific training. The lack of this pre-training of participants is why most ideation sessions fail, though professionalisation of facilitation is also likely to improve brainstorming outcomes.

**| KEYWORDS**

Brainstorming, ideas, ideation, creativity, creative thinking, problem solving

**| ARTICLE INFORMATION**

**ACCEPTED:** 20 March 2023

**PUBLISHED:** 26 March 2023

**DOI:** 10.32996/jbms.2023.5.2.9

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### **1. Introduction**

Brainstorming was first outlined by Alex Osborn (1953) as a group ideation exercise, though sometimes the word is now used to refer to being alone, having ideas and noting them down for future reference. The individual ideation session is entirely within the individual's control, conducted wherever suits the individual and to whatever capricious rules the individual instigates. Herting (2021) has set forth a picture of someone "sitting down alone with a notebook and racking their brain for a brilliant idea", though the word "racking" may give lie to Herting's own biases, something to be avoided in ideation.

Osborn was strongly concerned with developing a set of rules for the group ideation exercises now most considered as "brainstorming". Adams (1979) refers to Brainstorming as "an exercise in structured spontaneity", which may be something of a contradiction in terms. Equally, it seems likely that a group will be more in need of rules to function and particularly to produce the desired outcome of a set of ideas after exhaustive consideration of all possibilities that may be applied in future action.

Osborn's rules for brainstorming may be summarized as follows:

1. Generate lots of ideas. Osborn puts this as "we should pile up more and more alternatives" (Osborn, 1953).
2. No evaluation or criticism of ideas is permitted. "Judgement is ruled out" (Osborn, 1953). Criticism would inhibit the search for ideas.
3. Encourage unusual ideas. Osborn exhorts that we "should seek quantity [of ideas], with wildness willfully allowed" (Osborn, 1953)

4. Combine, build on and integrate ideas. Osborn (1953) concludes that "In addition to contributing ideas of their own, participants should suggest how ideas of others can be turned to better ideas; or how two or more ideas can be joined into still another idea".

However, the authors are skeptical of reducing Osborn to four rules. Not least, Osborn (1953) was interested in all aspects of creativity, not just ideas generation, let alone just brainstorming. Brainstorming in itself is representative of a wider aspect of Osborn's interests, that of developing and providing tools to raise creative thinking, though some have argued that Brainstorming is more than a tool (see Literature Review below). It is likely that the thoughts in all of Osborn's focus areas are more important than a minimization to the point of absurdity as four rules. Perhaps the real key in Osborn's work in creativity is deferred judgment and making all aware of its importance, together with offering tools to promote deferred judgement.

It is widely accepted in business and academia that most brainstorming sessions do not work as well as they should. Furnham has straightforwardly stated, "Research shows unequivocally that brainstorming groups produce fewer and poorer quality ideas than the same number of individuals working alone" (Furnham, 2003). Putnam and Paulus (2011) considered brainstorming groups of two types, where individuals within the groups generated ideas in isolation and where idea generation was as an interactive group. The finding was that both more and more original ideas were generated in the groups where ideation was individual. Additionally, it was found that where ideation was individualized, the group was more likely to select more original ideas during decision-making.

In a 2016 survey of 126 business executives conducted jointly by the Kellogg Business School at Northwestern University and Blue-Chip Marketing Worldwide, a Chicago based marketing agency, only 12% of respondents felt that brainstorming sessions at their firms were highly effective, and only 10% agreed that the sessions served to broaden their knowledge (Klein, 2016).

## 2. Literature Review

There are many reasons why brainstorming routinely fails to impress. Most brainstorming sessions today do not adhere to the guidelines established by Alex Osborn when he first conceived the ideation technique back in 1953. They are, in effect, little more than modified meetings and should not even be referred to as brainstorming. The most important reason for brainstorming's shortcomings, however, has nothing to do with technique or method. It has to do with people. The mistake is made of believing that brainstorming is something that everyone can do well. Some people can, but that is not true for most people. The reality is that people are never taught how to "ideate". Ideation is essentially structured brainstorming (Fralely, 2003). Arguably, brainstorming is not a tool. It is a skill, and it is impossible to become proficient at any skill without effective training and practice (Seelig, 2017). Instead of training, brainstorming session participants receive some quick guidelines and are then expected to miraculously perform. Some firms use outside facilitators to manage and encourage participants and to keep the ideating on track (Kent, 2017). Unfortunately, it is akin to putting a conductor in front of an amateur band and expecting great music.

However, it may be suggested that for effective brainstorming, the sessions should be handled by ideation professionals, not amateurs, which is the opposite of what is normally done. As meetings in general, there is a need for someone to keep the meeting on track. Barron has concluded, "Meetings without proper (or any) facilitation tend to flounder around the edge of great ideas" (Barron, 2020). The meeting facilitator needs a particular skillset, albeit those soft skills are to the fore in the mix (Goyal, 2010). Perlow et al. (2017) have spoken of encouraging people to raise issues, take risks, and make mistakes. Arguably the facilitator's task includes managing the emotional culture of the group (Barslade & O'Neill, 2016) through a substantial array of skills and tools in empathy and communication.

Turning to the participants in brainstorming, there must be no strong expectation of good ideas from company employees. They need not be good at ideation, and it is not what they were hired for. In the areas of idea generation and creativity, company employees are amateurs. If good ideas are wanted, the need is to bring in outside professionals, not merely as guides and facilitators but as active idea-generating participants.

Professional brainstormers will not always be experts in the subjects they brainstorm, but they will be experts in looking at any subject from multiple points of view simultaneously and generating ideas about that subject and any problems related to it. It is naive to expect meaningful results from a brainstorming session when the group is filled with amateurs who have not been trained and have not mastered the skills. The point is that brainstorming embraces a skillset and one separate from participants' usual professional skillset (Seelig, 2017).

The results of brainstorming are mostly inconsistent and tepid (Fralely, 2003). While leaders cling to the idea that bringing together a big group of people will produce truly innovative ideas that rarely happens. Simply these people are amateurs at the ideation game, however skilled as, say, professional footballers. Some people are afraid of introducing radical ideas in front of a group and do not speak up; others dominate, while others are only partially mentally there and partially somewhere else (McGregor, 2011).

The majority of the people who brainstorm bring severe handicaps to the process and cannot be expected to achieve anything more than mediocre results (Gogatz & Mondejar, 2005).

Because of this, many firms have been trying to improve their brainstorming sessions by including cross-functional groups of people from all different parts of the company to benefit from diverse viewpoints and skills (Frost, 2017). Well intentioned, but this is essentially just upgrading a group of amateurs to a group of diverse amateurs.

The deficiencies remain. Impediments can range from worrying about one's image and work status (chances for advancement) to wanting to appear intelligent and knowledgeable and not wanting to offend or alienate any of the bosses. This risk aversion is a big factor in the success or failure of brainstorming sessions (Kelly et al., 2022).

The term The Sunflower Bias was coined to explain how some team members always seem to follow the leader, rarely push back and rarely contribute any original thought. A 2017 McKinsey & Company interview with Bernhard Gunter, then CFO of the large German utility company RWA, found that sunflower biases were common at the firm and that when the boss speaks up first, the likelihood that anybody who is not the boss will speak up with a dissenting opinion is not very high (Heiligtag et al., 2017). The bias was found at almost all levels of the organizational hierarchy. It was also found that employees withheld certain ideas and scenarios that they felt management did not want to hear.

Most people who brainstorm do come up with ideas, but more than anything else, they want those ideas to be applauded and accepted. They do not want to look foolish. Therefore they judge and self-censor most of their ideas (Gogatz & Mondejar, 2005). In brainstorming, you want and need each and every idea, especially the really provocative ones, and for that, you arguably need professional brainstormers.

Two talent elements are involved in brainstorming sessions, participants and facilitator or facilitators. All too often, the facilitator is just someone from HR or, worse, the boss. Note the reference above to The Sunflower Bias but also that a 2020 survey of HR leaders found that only one out of five HR leaders believed that employees in their company trusted the company leaders. The same survey found that 50% of employees said that they also did not think HR was trustworthy (Wong, 2020). All this said attendees should also be "professionalized" to the extent of at least being well-briefed in the brainstorming process; better still, have had some level of training.

Brainstorming sessions assemble people with knowledge on a specific topic or problem who also work for a specific organization. Having knowledge on a subject does not necessarily mean that someone will be able to formulate ideas relative to that subject and, if they do, be able to express those ideas in public, group setting. Ideation sessions are complex events. It is difficult to guide the collective imagination of a team (Fraley, 2003).

Because people want their ideas to be accepted, they often lobby to have their own or their friend's ideas accepted. Because of this, Alex Osborn advocated that the eventual evaluation of the ideas generated be done by people who did not participate in the ideation session (Besant, 2016). The use of professional brainstormers avoids this problem, as participants are only involved with generating the ideas and not with developing them or with taking credit for their development and use.

The reason brainstorming participants need some level of training is that whilst Osborn's (1953) set of four brainstorming rules is straightforward and relatively easy to remember, they are highly challenging to implement (Seelig, 2017). The first rule established that the goal of brainstorming was to generate as many ideas as possible. The emphasis during the ideation stage needs to be on the quantity of ideas generated rather than their quality. Another rule held that participants should combine ideas or build and improve on another person's ideas (Osborn, 1953). Those are the two easy rules.

The other two rules were and still are, the difficult ones. These state that judgment needs to be suspended during brainstorming sessions and that all ideas, topics and subjects are valuable and necessary and, therefore, welcome (Osborn, 1953).

Many people believe that the rule concerning judgment pertains only to not criticizing the ideas that others put forward. On the contrary, it goes much further than that and is linked to the final rule, which states that all ideas are welcome and, in fact, necessary, even the ones that may be deemed wild, crazy, impossible, radical or offensive, since the act of deeming something crazy, or offensive is a judgment. Merriam-Webster defines judgment as the act of forming an opinion or evaluation.

That means that in order to get all possible ideas, all topics and subjects should be considered, nothing excluded, if only temporarily, during the brainstorming session, because they may serve as ladders to other topics, subjects and ideas. People bring their opinions, ideas, biases, education, culture, socio-economic status and religion to every conversation. For two-way

conversations, we need to be able to suspend our judgment of someone else's perspective in order to fully participate in the dialogue. This is not an easy thing to do (Horn, 2016). It goes beyond suspending judgement of another person's ideas and views but includes topics, tones, language and demeanors as well. Not everyone can, in public, deal evenly, honestly and openly with all topics and subjects and are capable of suspending judgments on all topics, subjects, people and actions (Gogatz & Mondejar, 2005). This inability is what takes true brainstorming out of the range of amateurs and why most ideation sessions fail.

A hybrid approach to brainstorming mixes outsiders with insiders, with insiders usually numerically dominating. The allure of this is that it brings diversity to a group, and a firm can believe that the outsiders (consultants or facilitators) will lead and inspire the insiders. There are several problems with this. If the consultants and facilitators are being paid by the firm, they will be subject to the "want to be hired again" bias and temper what they do accordingly, which effectively would undermine their value. The second big problem is because the insiders may not be capable of suspending judgment and of dealing with all topics and styles, there is a high probability that many among them would be offended by the tone, style, language or openness of the outsiders and rebel against the process. This would set up an insider versus outsider conflict. Perlow et al. (2017), referring to meetings in general, interestingly distinguish between neutral (outside) facilitation as a positive but outside consultant interpretation as potentially undermining success.

To come up with penetrating ideas, people need to be able to trespass on social rules (norms) and shed their inhibitions, and without significant training and preparation, this is impossible (Gogatz & Mondejar, 2005). Merriam-Webster defines inhibition as a mental process which restrains behavior or another mental process (thought).

The concept of social norms is here to be understood in its liberal sense as common standards of socially acceptable or appropriate behaviors shared by members of the same group (Hechter & Opp, 2001). Social norms are unwritten rules that indicate how deviant behavior is from consensual standards (prescriptive norms) and what behaviors are considered proper or expected in a given context (descriptive norms) (Samland & Waldmann, 2016).

Every new idea we think separates us from other people, and expressing the idea increases the separation tenfold. Many people are not likely to feel comfortable entertaining, let alone expressing new ideas (Ruggiero, 1997). They fear rejection too much. Social norms serve to inhibit people in group ideation sessions and cause them to self-censor ideas or thoughts which might be considered objectionable or unreasonable (Nemeth & Goncalo, 2005). Only highly creative adults, artists, writers, performers and certain trained ideation professionals are capable of trespassing these social norms when need be. Highly creative people are not limited by a need to conform to social norms (Bamgartner, 2013).

The highly creative mentally separate their worlds, much the way people who speak several languages separate languages. The two mental worlds of the highly creative are identical, except that the creative world lacks rules and judgment. "Hell! there ain't no rules around here! We are tryin' to accomplish somep'n!" said Thomas Edison, the famous inventor (Rosanoff, 1932).

Creative people, like children, can mentally visit their creative world whenever they want inspiration and ideas. Openness to experience is characterized by curiosity, creativity and an interest in exploring new things. Open people tend to do well at tasks that test their ability to come up with creative ideas, such as imagining new uses for everyday objects like bricks or table tennis balls (Klein, 2017).

Brainstorming sessions most often focus on problems to be solved. When you are solving a problem, you are taking action to have something go away, the problem (Fritz, 1984). When you are creating, you are taking action to have something come into being, the creation. The intentions of the actions are opposite. Creators come from a tradition entirely different from the one in which most people have been raised. That is why professionals with creator mindsets are needed for ideation.

To get a good idea, you have to have a lot of ideas and throw the bad ones away, was the ideation advice offered by Linus Pauling, American chemist and Nobel Prize winner (Kirwan, n.d.). One of the big differences between an amateur and a professional is the quantity (in terms of time, effort, dedication, practice, and solutions), and the goal of a brainstorming session, according to Osborn (1953), is also quantity. When a group of managers at the start of a large corporate training session are asked how many in the room recently reviewed the topic and have a long list of questions ready to ask, there may well be no response. Amateurs practice only as much as they think they have to, while professionals never stop. For success, you have to practice even, maybe especially, when it hurts (Goins, 2017).

BBDO, the advertising business, went through 47 continuing brainstorming panels with 401 brainstorming sessions and produced a total of 34,000 new ideas, of which 2000 ideas were deemed of superior quality and worth investing in (Besant, 2016). Four hundred and one sessions in the course of a year represent a lot of sessions and afforded participants substantial practice. 34,000

ideas from 401 sessions mean that the average session recorded 85 ideas. Osborn suggested that participants should be well trained in brainstorming rules and techniques prior to a brainstorming session (Osborn, 1953). Osborn's contention on training is both interesting and often forgotten. Fascinatingly in the BBDO example, the training appears more as a by-product rather than an intention.

In considering Wong (2020) earlier, trust was mentioned as a variable in the success of brainstorming. Maybe the cynicism about those within a company and their own ability to trust and work with each other, as illustrated by Wong (2020), is the reason, for better or worse, to look to brainstorming as part of a broader embrace of Open Innovation, that is working with and sharing information with people who are not part of your firm. Chesbrough and Bogers' definition of Open Innovation was simply, "We define open innovation as a distributed innovation process based on purposively managed knowledge flows across organizational boundaries, using pecuniary and non-pecuniary mechanisms in line with the organization's business model" (Chesbrough & Bogers, 2014).

Accordingly, Open Innovation asserts that firms can and should use external ideas, methods, and expertise as well as internal (Dahlander et al., 2020). Open innovation refutes the traditional model of ideation, which relies entirely on internal resources and expertise to generate, manage and sustain new business ideas by welcoming creative talent, research professionals, and subject matter experts from outside the company (Richards, 2021). The open innovation strategy is rooted in the belief that increased information sharing and collaboration will invariably deliver better results.

Open Innovation and information have been a major thread of thought and change in supply chain management for a number of years, maybe particularly associated with the rise of lean production and lean supply (e.g. Soderquist et al., 2016). That same networked supply chain process receives prominence in current global supply chain difficulties. Referring to relatively early in the COVID-19 Pandemic, Sultan (2022) concluded, "More broadly, there is a recognition that resiliency is impossible unless buyers, suppliers and other parties along a value chain are willing to share data and collaborate". The collaborative imperative is even greater now with the Ukraine War and global inflation added into the variable mix.

The problem is that trust is not something that the traditional, siloed business model, which has as its basis that business is war, fosters (Desjardins et al., 2021).

Open innovation is usually classified into 4 types, intracompany, intercompany, external experts and open to the public. The first, intracompany, means bringing together and having people from multiple departments within your own company work together. While this may well appear contrary to open innovation, it points to the fact that employees of large firms traditionally do not always trust and know the people in their own firm, let alone people from competing firms and outsiders (Richards, 2021).

Trust is like the air we breathe, Warren Buffet once observed. When it's there, no one notices, but when it's not there, everybody notices. To encourage innovation, firms need to make trust a priority (Hall, 2021). Chesbrough, a founding father of Open Innovation, quipped that "not all the smart people work for you" (Rao, 2007). The message then becomes to get some of these people working with you.

Firms, though, much as they do with creativity, do not recognize the importance of people in the open innovation process but focus instead on having the correct procedures and practices in place. It is as if a professional sports team focused entirely on their stadium, field (pitch in football) and equipment and not on the quality or condition of their players. You can give the same recipe to ten cooks, some make it come alive, and some make a mess. A system does not guarantee anything (Fritz, 1984).

Before any organization can reap the economic benefits of open innovation, it must overcome a number of legal, operational and cultural challenges. The top three obstacles to open innovation often cited are: managing intellectual property issues and other legal risks, processing ideas quickly and establishing an efficient internal structure (Von Dyck, 2015).

The same thing is done with creativity. Some firms use financial or non-financial incentives to motivate employees to use their creativity (Doran et al., 2017). This suggests that employees can be consistently creative, and the reason they are not is that they do not want to be (lack of motivation) or care to be. If this were true, companies would be able to "buy creativity", but they cannot. Managers need to realize that creativity does not respond to orders (Allen, 2014). Neither does it necessarily respond to biscuit choice or even to what is for lunch, office routine elevated to a higher level. It is worth remembering that highly creative people are often irked by such things, and find them a disturbance in the creative process, Tchaikovsky an example (Tchaikovsky, 2004). It appears that businesses treat brainstorming participants as amateurs from the outset.

In summary, surveying the existing literature on and cognate to brainstorming suggested that the difficulties in brainstorming producing substantial positive outcomes arise out of businesses failing to understand the nature of people, their staff included, and the nature of the creative process, perhaps particularly the need for suspending judgement of the self and others, getting down to saying whatever comes into the participant's head and those of other participants, all having been subject to many years socialization in what is doable, what may be said, generally what is permissible.

In a longitudinal test of creative potential, a NASA study found that of 1,600 four and five year-olds, 98 percent scored at the "creative genius" level. Five years later, only 30 percent of the same group of children scored at the same level, and again, five years later, only 12 percent. When the same test was administered to adults, it was found that only two percent scored at this genius level (Venkatraman, 2018).

Brainstorming needs the participant to travel back to that relatively un-socialized childlike state and to allow other participants to do so. For the brainstorming session to come close to being successful, the implication is skilled professional facilitation of the session and significant training of the participants. Clear research questions were suggested for the empirical research within this study, testing propositions in the literature and seeking solutions to deficiencies in the brainstorming process and scenarios.

### 3. Methodology

For the empirical research in this study, two simple research questions were set:

- How to identify and correct current structural flaws in brainstorming methods?
- How to structure brainstorming sessions for optimal performance?

Decisions were made to construct a brainstorming series to collect fresh empirical data through observation of the group, the researchers experiencing issues first hand. Data-gathering was qualitative in nature and within the phenomenological tradition (e.g. Qutoshi, 2018), the latter also applying to subsequent data analysis. Partly because of the constraints of the COVID-19 era, a virtual platform would be used for the brainstorming sessions. Because of the use of virtual meetings, recordings of the sessions would be readily available for subsequent analysis, the method used being Reflexive Thematic Content Analysis (Braun & Clarke, 2019).

Brainstorming sessions were conducted across February and March 2022 (three sessions across three consecutive weeks, each session of three hours duration). These sessions were conducted online, using Zoom, as envisaged. Participants were asked to participate in online brainstorming sessions for a study on brainstorming as a particular method of ideation, idea-forming.

The cohort consisted of fifteen volunteers from nine different countries. Countries represented were the USA, France, India, Nepal, the United Kingdom, Hong Kong, Vietnam, the Czech Republic and the Philippines. The breakdown by age ranged from 22 years to 76 years. There were nine men and six women. The cohort was subsequently divided into two sub-groups, although the participants were not told about being put in the sub-groups. The first group, Group A henceforward, consisted of five men and four women.

Group A was given a written and then oral orientation on the brainstorming rules and techniques that would be used. This included the need to suspend judgment and embrace all topics and subjects and extended to training in creativity and ideation.

Included in the information Group A was given was the following: Knowledge only progresses when all ideas can be fully presented, countered, talked through and refined. This entails exploring ideas that some people may find offensive. The notion that something is a certain way (including radical, obscene or offensive) is a judgment. Therefore, judgment needs to be suspended in the idea generation or problem-solving phases of creative work. All aspects of the problem or subject must be allowed to be questioned and/or challenged. Nothing should be off limits

The second group, Group B henceforward, consisted of four men and two women. Group B only received the oral orientation to brainstorming, not the written paper.

Analysis proceeded in two ways through Reflexive Thematic Content Analysis. Analysis was mostly for the total cohort, but a major difference immediately showed between the two groups.

After three sessions, the participants in Group A who had received the fuller orientation, written and oral, were fine and eager to continue, while three of the participants in Group B felt offended by some of the tones and attitudes of a few of the participants from Group A and did not wish to continue. Some of the words they used in their objections were "rude, bullying, interrupting, did

not listen, tone". The objections seemed to focus on manners, demeanor, procedures, style and attitude, so how things were said more than what was said and how some people (not themselves) in their group were treated. Clearly, there was sensitivity and not just to do with one's ideas being criticized.

The Reflexive Thematic Content Analysis across the total cohort revealed a number of themes:

### ***3.1 Participation***

The cohort was an international group. Participation appeared dominated by those who had the greatest English language skills and by seniority, defined by age and/or experience. Confidence can be a major factor, and that can come out of national character as much as linguistic capability; some are quieter, and some are more willing to speak out. A facilitator can help individual participants to become involved. That could be asking them a question, asking a supplementary question, the answer to which would clarify their position to the benefit of all or repeating what the participant had said, perhaps with some change in phraseology for clarity. The last happened most in these sessions. Once someone began to participate (speak), it was easier for them to speak again. "Speak" though may mean just that, not generate ideas.

### ***3.2 Insecurity***

Levels of insecurity varied in the cohort and were not centered on any one reference group. Some individuals began sentences with phrases like "I'm not sure this is important or relevant" or something similar. Even when they were assured that all contributions were important, some continued to prefix their statements with admissions of insecurity. Others, especially some of the senior people, tried to introduce certain structural procedures so as to shape the format and establish procedures they were comfortable with (more structure).

### ***3.3 Inability to Suspend Judgment***

Participants consistently offered views which were laced with judgments but maintained that they were not judging because they were not commenting or criticizing the views that others in the session had put forth. They equated judgment with criticism primarily. When discussing a subject, they would exhibit judgments. Because these judgments were not reflected in the formation and expression of an idea related to the subject, they felt they had suppressed judgment.

### ***3.4 Trust***

There were degrees of trust within the cohort; not least, some members already knew each other through work. Paradoxically this was not necessarily helpful in that visibly; those participants were separate from the wider group. Most participants only seemed to trust the few they knew and made no attempt to reach out to others. Nor did those others attempt to reach out. There was no sense of teamwork and no encouragement for it. On occasion, there appeared to even be distrust, including of the facilitator, for instance, around favoritism.

### ***3.5 Communication***

This was a facilitated brainstorming session series. Communication was very much through the facilitator, but also to the facilitator. There was little interaction between participants, perhaps implying limited "buy in" and certainly no understanding that communication implies more than simply speaking. A raised eyebrow can be worth a thousand words in conveying meaning, yet a significant number of participants turned their cameras off, despite being asked otherwise. Even though the stated aims of the sessions were to generate as many ideas as possible on a certain topic in a specified amount of time, most of the participants were more comfortable simply discussing the topic rather than generating ideas in relation to it and actively pushed sessions toward only discussion.

### ***3.6 Cross-Cultural Understanding***

Cross-cultural communication might mean many things, from the language spoken, language use and all manner of semiotics. Sometimes there is a high local cultural content, even when operating in a second language. An accusation of favoritism was made within the cohort. A special relationship was deemed to exist. This arose largely from the use of the prefix "Sir" when a participant was addressing the facilitator. It is simply the best available translation of a Nepali prefix that denotes the number of things but mainly that a person is simply older than the speaker and is held in respect.

## **4. Results and Discussion**

The background to this study was that Brainstorming, 70 years on from its inception by Alex Osborn (1953), stood largely discredited and under-used. The research questions were concerned with the identification of flaws in brainstorming methods and how to structure brainstorming sessions for optimal performance. In simple terms, the researchers asked what has been going wrong but also what corrections to make, with perhaps a focus on the corrective action. The hope was to return brainstorming to current relevance. That will not happen if the same mistakes are made over and over.

The researchers set up a series of brainstorming sessions to observe and analyze a piece of new empirical research at a time of fairly universal anxiety through COVID-19, a sudden war in Ukraine, and already global supply chain issues, especially for food. Global inflation followed. The researchers were faced with sensitive participants. The offence was easily taken by a number of participants. Likewise, for some, the facilitator role, not outsourced to a specialist, became contentious, maybe even the facilitator personally.

Firms traditionally believe that employees can leave their feelings and emotions outside before entering their offices. In reality, employees carry into any meeting or brainstorming session checkered histories which will influence their actions. Merely telling participants not to criticize the ideas their colleagues put forth misses the possibility that a participant's attitude may be negatively slanted by a prior imagined slight or insult by one of the session's other participants. Equally, participants' whole life and work experience, including within the current company, may not prepare them for a brainstorming session. It must be remembered that Osborn's position, working with the creatives at BBDO, an advertising agency, was unusual and far removed from ordinary business people. Workplace culture is all-important (Hollingsworth, 2013).

Two of the four guidelines established by Alex Osborn (1953) when he developed brainstorming were that during the ideation stage, judgement needs to be suspended and that all topics and subjects are necessary because the exclusion of certain topics represents judgment. The empirical research within this study found participants consistently unable to suspend judgement, in fact, unaware when they were judging (Theme: Inability to Suspend Judgement). Considering Osborn's rule on generating as many ideas as possible, session participants were reluctant to produce ideas at all (Theme: Communication and Theme: Insecurity). If there was reluctance to produce ideas at all, that meant that Osborn's rule on unusual ideas was not followed. Reluctance to speak was not necessarily a problem, but that was a contribution to a discussion, not to ideation (Theme: Participation). One researcher felt that participants were finding it counter-intuitive to stress quantity rather than the quality of ideas and were put-off from the outset.

Laying aside, Osborn's (1953) specific rules for brainstorming the situation after three sessions must be remembered. The participants in Group A who had received the fuller orientation, written and oral, were fine and eager to continue, while three of the participants in Group B felt offended by some of the tones and attitudes of a few of the participants of Group A and did not wish to continue.

That situation seems to imply the importance of strong preparation of brainstorm participants at the very least across Osborn's (1953) four rules for brainstorming but arguably far more, for instance, around the Theme: Cross-Cultural Understanding is given that as time progresses, any brainstorming group is likely to be less mono-cultural and also again the Theme: Trust, again as groups are less culturally cohesive but also as society becomes ever more atomized, ever less naturally trusting of newcomers and outsiders and, perhaps ever less capable of reaching out to them.

The question becomes what responses are to be made to the huge challenges brainstorming participants have? Whenever a theme was suggested in this research, it was through deficient performance. That might have been by either or both of the facilitator or participants in the brainstorming sessions. The solution lies in the company taking ownership of that and not just hoping that the next time there is a brainstorming session, the outcome will be better. The company needs to be professional in its approach both as a matter of business process and employee care. It must invest time and money toward better brainstorming outcomes.

The implications are listed above (Methodology section). Participants need training in the processes and techniques of brainstorming for maximum impact. A solid briefing for participants is the minimum requirement but preferably more substantial training to build a cadre of "professional" participants within the business. Truthfully, with its singular focus on brainstorming, inevitably interpreted as Osborn's four rules, that is still insufficient. For instance, what of substantial training in cross-cultural awareness or what of trust-building exercises and process knowledge building within the participant cadre? These two alone are major pieces of training. In fact, trust building extends beyond simply training to a longer-term multi-variate exercise in all that the company does.

A facilitator cadre can be built within the company using similar training and similarly requiring time and money. Perhaps more usually, not least for smaller companies, the approach is one of outsourcing the facilitation of brainstorming sessions to paid professional facilitators, hopefully, people with superior knowledge of the processes and techniques of brainstorming, together with an extensive soft-skill set, easily capable of attenuated empathetic communication, whilst keeping participants solidly to the task in hand.



## **5. Conclusions**

The research questions for this study were designed to elicit the problems of brainstorming, performative flaws and, thence, how brainstorming outcomes might be optimised. Specifically, two research questions were offered, how to identify and correct current structural flaws in brainstorming methods and how to structure brainstorming sessions for optimal performance? No hypotheses were offered by the researchers. In the phenomenological tradition, as closely as possible, the participants were to speak for themselves through this write-up, albeit that much observation in-session was undertaken by the researchers as well as subsequent Reflexive Thematic Content Analysis of the recordings of the brainstorming sessions.

The themes that emerged from the thematic analysis were not only critical in this study but an important contribution to knowledge. This was accomplished in two ways, to include deep detail consideration of brainstorming sessions, but also a broad-wash approach implied by the location of that detail into broad analytic themes that would be useful to businesses, brainstorming practitioners and academics going forward. Clearly, for instance, businesses need to give careful consideration to their staff competence outside their normal professional sphere.

To simplify, this research found two particularly problematic areas for participants, those of deferring judgement and its concomitant of embracing all topics. These were key messages from the research, but the research offered another key message, perhaps a more hopeful one, in that relatively little training of participants appeared to have an impact. The difference between the study's Group A and Group B seemed marked. The fuller induction of Group A, including some wider training beyond brainstorming to cover creativity and creative processes, seemed to have paid dividends.

Part of the importance of the current study lies simply in gap filling against most of the literature on brainstorming, both academic and in the more popular media. The context of all writing types has mostly been a brainstorming process descriptive, not offering critique or performance enhancement suggestions where deficiencies are found. This study offers action content in bringing forward enhanced training for participants, even companies building trained participant groups ready to step in whenever. All this said, this research also showed the need for well-trained, highly- skilled facilitators to become the norm, even if outsourced. Overall the need is for "professionalization" of all talent elements involved in brainstorming. Having even one poorly prepared participant can ruin the entire session.

This study had limitations, and in terms of general good practice, the point must be made of future researchers operating in other locations, at other times and with other demographics. Of particular concern is that the current study had limitations imposed on it by COVID-19 social distancing requirements. All brainstorming sessions were virtual. Comparisons need to be made between that and future face to face sessions.

Additionally, there must be very specific testing around professionalization to include training and different training specifications for participants. Also, different session processes need to be researched and considered against each other, for instance, whether some time in a session should be devoted to individual ideation, pairs work or groupwork from within the total cohort.

Professionalization of the facilitator role should also be given further consideration by the simple expedient of comparative testing of similarly trained or un-trained brainstorming participants led by "amateur" or "professionalized" facilitators. It must be remembered that the sessions in the current study were only ever facilitated by non-professionals.

Awaiting further confirmation (or otherwise) through future research, it may, in the meantime, be suggested out of the current study that professionalization of brainstorming participants in the sense of receiving very solid induction, training in brainstorming techniques and propositions would produce a bonus in brainstorming productivity, as with the cohort in the current study. It might also be suggested tentatively that professionalization of the facilitator role, meaning paid facilitation, is likely to produce more solid outcomes in ideation. That is offered only tentatively to the extent that it is not clearly evidenced by the present study, which lacked comparative tracking of groups and facilitators.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

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**Publisher's Note:** All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

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