

Research Ethics and Possible Effects of Practicing Aversion Techniques in Research to
Manage Self Injurious Behavior in Children with Special Needs

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Abstract

This study highlights the ethical implications regarding management of self-injurious behavior, using aversive techniques for research purposes. The case analysis of Rapoff study (1980) on a blind child to reduce his self-injurious behavior was done to amplify the consequences of punishment techniques in research. Moreover, the replication risk of such research, that could magnify the repercussions in cultural context of low middle income countries like Pakistan, is also discussed. It is concerning that methodology of Rapoff considering the short-term positive results and good intention of the researcher. The exploration revealed that the simultaneous practice of contrasting techniques of reinforcement and punishment, training parents to punish child and inflicting discomfort to an already vulnerable child were the major concerning issues in study. It is concluded that, care must be taken while practicing research with children, in a bid to inhibit the risk of misuse or malpractice to seek benefits. The study also supports the use of higher ethical standards in research methodologies, that align with cultural context of Pakistani society, when working with the population vulnerable to self-harm.

Key Words: Rapoff Study, Aversion Techniques, Self-Injurious Behavior, Research Ethics, Pakistani Society

Introduction

Ethics in the field of research has become a center of attention lately and it is evolving rapidly. The sensitivity to ethical practice is not only mandatory for researchers but also the field practitioners. Especially the research that is focused on investigation of practice modalities such as assessment or management of clinical population shall have an effective criterion to be followed. The more the population of the study is fragile the more the need is to be ethically vigilant. The consequences of a research practice are always a matter of concern for most of the studies focused to investigate effects of different management strategies. The citing of Rapoff study with encouraging words by Banyard and Cara (2011) in their book named Exploration of Ethical Issues in Psychology is deplorable. The Rapoff (1980), to determine effectual yet least restrictive treatment regarding self-injury, worked on suppression of behavior that induces it. He employed a combination of multiple standard and reversal designs, in a bid to evaluate the influence of over correction, lemon juice, and aromatic ammonia on the rate of self-poking in a severely retarded child. The study is criticized for its apparent shape of practice yet justified on the ground of the target goal and motives of the researcher. Writers claimed to know the

researchers' beneficent character and displayed trust in his intentions. They further used the advantage of using management strategy over the use of medication to uplift credit of the study. Using such rationalizations is damaging to the progression in the field of ethical practice. The population with mental or physical disability or disorder especially needs to be treated with empathy. The usage of Aromatic Ammonia on a boy, who is deaf, blind, five years old, and engaged in serious self-injurious behavior was unsafe. Moreover, involvement of parents to practice using aversion techniques at home was a matter of serious ethical concern in Rapoff Study.

Self-injurious Behaviors (SIBs) are self-directed voluntary or involuntary actions to inflict Pain, Injury, hurt or damage to oneself. The dynamics behind this behavior can only be understood by considering the Emotional and Physical state of the subject. SIBs are commonly present in Children with neurodevelopmental Disorders especially Profound cases of Intellectual Disability or Autism. Repetitive and consistent SIB's range from actions causing minor to Major damages. According to Simon and Hollander (2008) SIB's are behaviors which has consequence of deliberate self inflicted pain towards ones body without any intent of suicide. The stereotypic self injurious behaviors are commonly presented in children with intellectual disability or autism spectrum Disorders. Stereotypic behaviors are repetitive, fixed, rhythmic, pedestrian and contentless acts that result in physical damage to the body if not controlled timely. Kurtz, P. F. (2003) carried out a research for functional analysis of self-injurious behavior. His findings revealed that in 62.1% SIB cases had the sources of reinforcement; the value rose to 87.5% if all forms of problem behaviors are included. Hence, self-injurious behaviors need immediate attention however, it is still a matter of debate that is it reasonable to inflict more pain to a child who is already going through many challenges in life. The main focus of management strategies needs to be reinforcement restriction rather than opting punishment for swift outcomes. The researchers and practitioners need to rethink that when a child is unable to comprehend his own safety, is it ethical to keep his safety at risk from the environment.

Actions, character, consequences and motives are four categories to gauge the ethical standard of any behavior. (Daeg de Mott, 2001, as cited in Banyard & Cara, 2001, p. 7.). Observing the consequences, indicate whether a behavior is right or wrong by looking at the result it produces. But when we observe the behaviour, we take a close look at the act and analyze what the individual is doing. Whether or not the individual is a decent (or virtuous) person who is generally ethical is the focus of the character category. When we examine motives, we focus on the goals of the individual exhibiting the behaviour and evaluate if they were attempting to accomplish a beneficial goal. When we look at consequences, we judge whether a behavior is right or wrong by looking at the result of the behavior. If it leads to a result that brings about an improvement for someone's life, we might think it is a good thing. When we look at the actions, however, we look at the act itself, and consider what the person is doing. The category of character is concerned with whether the person is a good (or virtuous) person who is generally ethical. When we look at motives, we are concerned with the intentions of the person carrying out the behavior, and we consider whether they were trying to do something good. Thus, the foundation

of research ethics does not lie in intention, the research procedure needs to have no indirect or long-term negative effects on the subject population.

According to the National Institute of Health and Care Excellence (NICE) guidelines on Self-Harm (2022), highlights that people who have self-harmed are cared for with compassion and the same respect and dignity as any service user." The NICE therefore underscores the norm for the attitude of clinicians towards the people who practice self-harm. It is imperative, because numerous studies have pointed out that staff attitudes are usually the reason behind unsatisfactory experiences. People vulnerable to self-harm can experience increased level of self-harm and refrain from getting help, if they are judged or are exposed to punitive staff members (NICE, 2022). Similarly, it has been determined that staff attitudes and actions towards individuals with intellectual impairments who self-harm either reinforce or exacerbate the conduct. Studies have shown that attitudes about self-harm among professionals are important for the upkeep of individual with those with (Hastings et al., 2003) or without intellectual disabilities (Samways, 2021).

The research procedures like Rapoff study need to address the issue of reinforcement to the use of Punishment based procedures. Moreover, making a child immune to aversive techniques who is passing through the course of development is projected to be a dilemma for research, management practice and parenting at home. Individual differences need to be considered and a good exercise is to be done with less threatening procedures of management rather than combining them all and trying at once. Furthermore, imposing pain is one step further punishment to a minor who is already suffering naturally. Therefore, the advancement of research ethics needs to curtail all such practices at the minimal level. The commonly known Rapoff study was originally carried out by Rapoff, Altman and Christophersen in 1980. The study was designed to investigate the treatment of Self Injurious Behavior (SIB) in a deaf and blind child by employing aversive and non-aversive techniques. The detailed exploration of the study revealed the following categories to be the main potential areas of ethical violations of the study.

Informed Consent

Before taking part in any study, it is imperative to make sure that participants or their guardians give their informed consent after completely understanding the phenomenon of the study. The child in present study was unable to be involved in permission due to his impaired physical and cognitive capacities. It was crucial to make sure guardians were fully informed of the study's potential dangers and benefits. Though the researchers claimed to be taking proper consent however, parents are unable to understand the potential risks of such a research practice. It could lead to the potential risk of generalizing the temporary and restricted management practice by the parents to use it in other mildly problematic behaviors of the child or using them on their other children. The parents could not understand the sensitivity of using any chemical agent as minimal as aromatic ammonia on the children who already have compromised immunity. Therefore, taking parents on board for implying aversive techniques was a major matter of concern for this study.

Alternative approaches

Before using punitive measures, researchers are usually required by ethical norms to consider less intrusive or harmful approaches. Alternative therapies, including environmental changes or positive reinforcement, might be useful in the case of self-harming behaviors without posing any risks. Rapoff integrated use of aversive stimuli with other less threatening techniques and did not identify the effectiveness of reinforcing techniques beforehand. It also undermines the importance of individual difference that one technique might not be effective for one person and can have positive effects on other, therefore instead of trying techniques separately, he chooses to use them all at once. Other options of positive approaches could have been used i.e Reinforcement and stimuli-based procedures or overcorrection. However, in another similar study of Rapoff, Altman and Christophersen (1980), Response-contingent Brief Restraint was found out to be effective in elimination of self-hitting in a retarded blind child.

The initial stages of SIB were examined by Hall, Oliver and Murphy (2001), they inspected the relationship of environmental events with early SIB through naturalistic observation. The findings indicated that low social contact not only exacerbated the development of SIB but were also majorly associated with development of early SIB. Therefore, it is eminent that the child develops a socially positive and enriching contact during his development neither to be faced aversive stimuli by them. The more trustworthy people surrounding a child facing the challenge of SIB, the more are the chances of his self-control.

Beneficence and non-maleficence

It is the ethical duty of researchers to optimize benefits and reduce damage to subjects. This entails keeping a close eye on the results of interventions and discontinuing them if they start to cause harm. Another study of around the same time in 1978, carried out by Johnson and Baumeister, focused on the suppression of repetitive self-injurious behavior by conditional inhalation of aromatic ammonia. When more traditional non-aversive modalities of therapy fail to reduce severely maladaptive behaviors, aromatic ammonia inhalation seems to be a useful substitute. The process could put the patient at risk, so it should be applied extremely carefully. It is possible for participants in studies involving punishment processes to inadvertently get hurt, thus researchers need to be careful to look out for any signs of harm and take the appropriate safety measures to minimize it. Aromatic ammonia inhalation seemed effectual substitute to non-aversive forms of therapy, to decelerate highly maladaptive behaviors. However, precautionary measures should be practiced while using this procedure should be used, as it may involve risk to the subject.

Generalization of Results

It is critical that aversive management taught to the parent can potentially be generalized to other situations and other children as well. It's possible that punishment methods that work well for people with developmental disabilities won't work as well in other populations or environments, and extrapolating the findings without taking these variables into account could result in harmful or inappropriate interventions. Moreover, behavioral management of children with special needs is a continuous process, therefore it is difficult to decide when to stop. Subjects could develop immunization against aversion. In a study of Lerman, Iwata, Shore and Deleon

(2013), the effects of intermittent punishment on self-injurious behavior were found to be ineffective after using continuous punishment. Therefore, the procedure opted by Rapoff cannot be accepted as a standard to justify the malpractice done in the process. No follow-up information was also being tracked to study the long-term implications of the study effects on the child and his parents.

Pokorski and Barton (2020) carried out a systematic review of the ethics of a variety of punishment-based procedures. Such techniques, when practiced on young children with disabilities, have usually resulted in reduced challenging behavior. The results were found out to be detrimental across age, diagnosis, target behavior, and treatment type. The study found out that researchers exercised minimal adherence to ethical standards, with no improvements over time. All things considered, even though Rapoff's 1980 study was carried out in accordance with the moral guidelines of the day, contemporary moral guidelines would probably raise serious questions regarding the application of punitive measures to stop self-harming behaviors in people with developmental impairments. In any research involving vulnerable groups, it is imperative that researchers and practitioners prioritize the well-being and autonomy of participants while carefully weighing the possible risks and benefits of interventions. Therefore, use of punishing strategy by the therapist and the parent had issues of ethics and generalizability of malpractice.

Pakistan is a developing country of 25 million individuals, despite its culturally enriched history, it is lagging in major fields of development. There is a trend in developing countries to follow the paths of developed countries, not only in knowledge advancement but adopting social set up as well. In such a case, the responsibility of Developed countries to follow the best standards of ethical values in their research work is mandatory so that the trickledown effect of the insensitive practices could be reduced. The research work of Rapoff is being used as a reference study to highlight this concern in context of Pakistani Culture. In 1980, Rapoff worked to identify the best suitable strategy to control self-injurious behaviors in a blind child, he chose various therapeutic techniques including punishment strategy for management. To extend the management plan at home setup, he involved parents of the child as agents of intervention. It gives rise to the concerns of not only malpractice but the risk of the generalizability of parental punishing strategy is alarming. The replication of such research methods in developing countries can give rise to more seriously dangerous practices by already authoritarian parents.

People of Pakistan has strong familial ethos however obsolete parental governing patterns that are irrelevant to new generations. Parenting in modern times is a challenge and it magnifies when the child is facing challenges of intellectual, behavioral, or functional disability. In a society like Pakistan parenting is still constitute of corporal punishment and unlike Developed countries there is no running national law enforcement practice to control it. According to research done in Pakistan's major provinces for UNICEF's Multiple Indicator Cluster Survey (2014), 81% of young children had been subjected to physical or psychologically abusive forms of "discipline" in the month before the survey. Solely 7% of children received non-violent forms of discipline, whereas 76% of children on average faced psychological violence, 66% physical punishment, and 31% severe physical punishment (struck or slapped on the face, head, or ears, or hit repeatedly). One of the most common types of violence against children in Pakistan, according to another different survey done that same year by the Society for the Protection of the Rights of the Child (SPARC), is physical punishment. As a result, the use of punishments against children is customary, therefore, Using Punishment strategies in behavioral management for Children with special needs can do a great damage for the overall treatment modality.

When parents, caregivers, or other adults adopt severe controlling practices, it puts the children with impairments at higher risk of negative outcomes. Children with impairments were more likely than children without disabilities to be physically disciplined, and they were also more likely to suffer severe physical punishment, according to a UNICEF study (2013) that involved children aged 2 to 9 from 17 different countries. Compared to caregivers of children without impairments, caregivers of children with disabilities were more likely to feel that physical punishment was necessary. According to Hendricks, C. et al. (2014), extreme physical punishment of disabled children is frequently used in mental hospitals, orphanages, institutions, care facilities, and shelters in Serbia, Russia, and Mexico. Children were punished by being beaten, pouring cold water over their head, kept in permanent restraints, being tied to chairs, tied up with bedsheets and kept in cribs. A study conducted by Sullivan and Knutson (2000) revealed that the chances of being physically abused were 3.79 times higher in the children with a disability

than those without it. The association between disability and physical abuse was also highlighted by Helton and Cross. The basis of their study was level of functioning in children, instead of diagnosis. The children with mild cognitive disabilities and no motor disability, had been exposed with higher rates of physical abuse. Paradoxically, children with less severe disabilities are less severe are more likely to be the victims of physical abuse. Therefore, as per the analysis of available research data in developed and underdeveloped countries, the children with disabilities are more susceptible to punishment practices.

In such a context around the world and more specifically in Pakistan, the ethical margins ought to be curtailed in a way that malpractices need to be eliminated not only in research but professional practice as well. The researchers hold the responsibility to set an exemplary behavior for the practitioners and parents in specific. In such a social context the studies like Rapoff needs to be highly discouraged so that any practice that can have the risk of maltreatment with any child can be eliminated. In the 1980 Rapoff study by Rapoff, Altman, and Christophersen looked at how disciplining techniques could be used to stop self-injurious behaviour (SIB) in individuals with developmental disabilities. However, it was noted that the use of aversive treatment approaches was guided by ethical principles at the time. The goal of the study was to identify the least invasive yet most successful course of management for a self-injury instance. The effects of overcorrection, lemon juice, aromatic ammonia, Differential Reinforcement of Other behaviour (DRO), and aromatic ammonia on the rate of self-poking in a profoundly impaired kid were investigated using a combination of several baseline and reversal designs. It was discovered that overcorrection and DRO were both ineffectual. While the rate of poking was suppressed by lemon juice and aromatic ammonia. Therefore, the overall finding revealed that aversion techniques are more productive when used in combination of other techniques. Even though the targeted benefits of the study are considered, there are a number of ethical concerns that contemporary ethical standards would bring up with this kind of research.

There are serious ethical questions about the use of punishment techniques, including aromatic ammonia or other aversive stimuli, to stop self-harming behaviours. Participants in such techniques run the risk of suffering psychological and physical harm; therefore, the intervention's possible advantages must be carefully balanced against the risk of harm. According to Dorsey (1976) the effectiveness of many aversive stimuli described in the literature is based on the minimal application of some potentially dangerous treatment which, if applied for long durations, could cause physical damage. An example would be the damage to the mucosa of a subject who had been exposed to long durations of aromatic ammonia. This study highlighting the potential risk for the usage of aromatic ammonia was carried out earlier than Rapoff study. Therefore, the risk of the procedure used could not be claimed to be completely safe. In another study, Singh (2016) reviewed the literature to determine the efficacy and justification of using aversive treatment with severely mentally retarded individuals. He concluded that this treatment, only be used where the self-injurious behavior is life-endangering or where there is risk of severe nonreversible self-mutilation or brain injury and where an alternative program is no longer possible should aversive treatment be considered. The responsibility for treatment must be shared between the physician,

the psychologist, and the nurses and other personnel who carry out the program. It is concluded that there is need to discourage the potential risks to ethics in research rather than justifying them. Researchers have to deal mentally or physically challenged Children with sensitivity and care to minimize the risk of any short term or long-term negative effect on their wellbeing. Therefore, a continuous effort to raise standards of research ethics is to be done on the part of researchers, practitioners and care staff of these children.

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