Examining service experiences: comparing methods to capture children's experiences

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Abstract

Purpose – Recent discussion on the service-dominant logic (SDL) and interest of studying service experiences in different contexts have been increased. However, this has brought up a new methodological challenge for contemporary research. Research methods used, need to capture experiences in the contexts of value co-creation while taking dimensions affecting to experience co- creation into account. This challenges researchers to adapt their methodology to be suitable for the context of studied phenomenon. This paper will provide a set of methodological snapshots applicable for SDL and service research in a context of healthcare services for children and their families.

Design/Methodology/approach – Study draws on selected literature from the fields of service research and healthcare services and tests new methods of capturing experiences in a special experience context of children's healthcare. We analyze and report a set empirical studies applying of qualitative and quantitative approaches for investigating experience in a special research field of children's healthcare experience. These methodological approaches include probing, structured and unstructured interviews and surveys. We review and compare the key characteristics of the methods and their respective benefits for service experience research.

Findings – Key findings shows that some research methods are more appropriate capturing children's experience data. Study also suggest that some methods are more appropriate for capturing data of co- creation in children's social contexts..

Research implications – The paper builds contribution by increasing understanding on how different research methods capture dimensions of service experience co-creation and help researchers interested in studying children's experiences to select an appropriate methodology for conducting their research.

Originality/value – Service experience research lacks paper that pieces together different methodology approaches capturing complex phenomenon of children's experiences.

Key words methodology, children's experiences, service experience, healthcare

Paper type – Research paper

1.   INTRODUCTION

Recent discussion on the service-dominant logic (SDL) and interest of studying service experiences in different contexts have been increased, and interest towards experiences is evident in the current service research literature. However, experiences are complex topic to study as they are subjective, dynamic, and unique interpretations of events and dependent on many personal and contextual factors (Zomerdijk & Voss, 2011). This has raised a new methodological challenge for contemporary research. The enthusiasm to better understand the complex nature of service experience phenomenon has generated a need of new ways to conduct research in this field of research. Research methods used, need to capture service experiences in the contexts of value co-creation while taking dimensions affecting to the value co-creation into account (Jaakkola et al., 2015). Therefore, research methods and approaches need to be adjusted to be suitable for the studied context to yield reliable, valid and rich data on the studied phenomenon and to match the current conceptual knowledge of the experience phenomenon. Up to now, far too little attention has been paid to analyzing different research methods in the service experience research. Furthermore, the empirical studies are primarily concentrating on experiences of adult customers (cf. Klaus & Maklan, 2012) leaving children's experiences unstudied. Even though gaining knowledge on children's experiences is essential in developing and providing services that respond to children's needs and preferences. Therefore, this paper will provide a set of methodological snapshots and comparison of methods applicable for SDL and service research for researchers studying children's experiences.

Children's experiences may differ, even dramatically, from experiences of adults. As determination of an experience is influenced and shaped by unique values, actions, beliefs, motives, traditions, cultural background, possessions, and aspirations of an individual actor (Bolton et al. 2014), children's are also responding and experiencing events differently. Children's view on the surrounding world and responses to events may differ (cf. Coyne et al., 2006), making topic interesting in phenomenological sense. In addition, parents, experts of their child, are inextricably part of children's life. Moreover, children, for example children with chronical illness, may go through a complex experience journeys. This makes children's experiences interesting subject to study in methodological perspective. Children's experience journeys may include multiple actors participating to experience co-creation and several spatial settings where experience is co-created. For service research and related methodology, this kind of special context make the phenomenon of children's experiences difficult to capture, but also relevant and interesting to study.

Recently, a considerable literature has grown up around the phenomenon of service and customer experience and empirical studies concerning the theme has been increasingly published (e.g. Teixeira et al., 2012; Gazzaoli et al., 2013; Surachartkumtonkun et al., 2015). However, there have been no studies, which concentrate purely on different methods capturing this multidimensional phenomenon of experience and would provide a comparison of those methods. Banerjee (2014) even argues that hidden customer events that are beyond the scope of organizations, i.e. in children's everyday life, may easily be unrecognized by the methods used in the customer experience research. Papers on the subject have been mostly restricted to limited comparisons of qualitative interviews and quantitative surveys and how these methods are yielding results and validating the findings of qualitative interviews (eg. Klaus & Maklan, 2012; Edvardsson et al., 2011). Therefore, there is an urgent need to increase methodological understanding in the field of experience research.

In addition, only a handful of studies develop understanding on how particularly childrens' experiences can be studied. Although some research has been carried out on children's experience, these studies originate from pediatric healthcare and social sciences streams and therefore do not elaborate how different methods capture the phenomenon service experience. A search of the literature revealed few studies that approaches the phenomenon from methodological sense: for example, Carney et al. (2003) studied appropriateness of verbal and visual structured and unstructured questionnaires in hospitalization experiences and Curtis et al. (2004) utilized different methods for children's experience research and how the process of data collection worked. However, the applicability of different methods to study children's service experiences remain unclear.

For above mentioned reasons, this case study seeks to examine the methods to capture children's experiences

and to provide comparison between four different methods and the ways they capture the phenomenon. The research questions behind the study are: How children's service experiences are studied? How different methods can be used to capture children's service experiences? In which ways different methods reveal the dimensions of service experience?

To answer the above presented research questions we first explore methods used in previous studies on children's experiences. Empirical part of this paper follows an extreme case-study design (Patton, 1980), with within case and cross-case analysis of methodological cases in children's healthcare experience. The present study fills a gap in the literature by comparing different methods and their applicability to study children's experiences. Furthermore, it helps researchers interested in studying service experiences to select an appropriate methodology for conducting their research on children's service experiences.

The paper starts by giving a brief overview of the phenomenon of children's service experiences and methodologies and particular challenges to study children' experiences. Then, in the third section,the research design and methodology used for method comparisons are explained. The fourth section presents the findings of the research, focusing on analyzing yielded results within cases and cross-cases. Finally, we present conclusions and discussion as well as implications for further research are presented.

2. CHILDREN'S SERVICE EXPERIENCES: PHENOMENON AND METHODOLOGIES

2.1 Service experience as a phenomenon and methods applied

Experiences are a challenging topic to study. First, experiences can be approached from few different perspectives and can be characterized differently. Helkkula (2011) divides experience to three different typologies: outcome-based characterization, process-based characterization and phenomenological characterization. The outcome-based characterization tends to focus on the results rather than the service experience process or perception.

Secondly, process-based characterization of experience takes an organization perspective to the experience (Helkkula, 2011). That is, experience is evaluated by the customer or other focal actor based on the processes, touchpoints and clues provided by an organization that triggers the experience.

Thirdly, the phenomenological characterization of service experience concentrates on the subjective experience of the service phenomenon. According to phenomenological vein, service experience is internal, subjective, event-specific, and context-specific experience of an individual (Helkkula 2011). Moreover, service experience is determined in a holistic and dynamic way uniquely by that individual (Verhoef et al., 2009). Accurately, this subjective response of the individual can be affective, cognitive, emotional, social and physical (Verhoef et al., 2009).

Moreover, service experience has different co-creational "dimensions". Framework presented by Jaakkola et al. (2015) posits experience co-creation to be co-created by six different dimensions: temporal dimension, factual dimension, locus dimension, spatial dimension, organization dimension and control dimension (Jaakkola et al. 2015). Importantly however, the beneficiary assesses the total service experience holistically rather than these individual dimensions separately (Jaakkola et al., 2015) but consist of many types of facets.

Temporal dimension of the experience co-creation means that experiences are influenced also by past memories and imagined future experiences (Jaakkola et al., 2015). Meaning that customer's earlier experiences affect to given service experience valuation and is dynamically updated through new experiences (Heinonen et al., 2010). Some of these experiences can be imagined by the focal actor and some actually lived (Jaakkola et al., 2015).

Part of the service experience emerges in focal actor's everyday life and therefore spatiality of experiences is multidimensional. Activities that unveil the experiences of a focal actor can be of any kind: ordinary, extraordinary, routine, mundane and everyday activities (Heinonen et al. 2010). It is even suggested that customer's everyday life is the experiential sphere of service experience processes (Grönroos & Voima, 2013). Co-creation of experiences often include multiple of actors participating to co-creation whose control in the co-creational processes can vary (Jaakkola et al., 2015).

The taken perspective on the service experiences governs the methodological choices that researchers should take on studying the service experiences. Table 1 presents an overview to used methods in the general experience research. Outcome-based characterization of an experience is not seen individualistically but as a total service experience of multiple respondents (Helkkula, 2011).This implies that methodology of choice to study experiences are more or less quantitative, for instance surveys. If the service experience is approached with a process-based typology methodological choices need to tackle both side of the phenomenon, organization side and the studied experiencer's sides. That is, on one hand the researcher needs to gather data on the organization's perspective on what kind of triggers or clues do they offer to the focal actor, and on the other hand how the focal actor experiences subjectively those triggers or clues. Phenomenological approach implies that researcher needs to collect data that captures the subjective, dynamic and contextual nature of the service experience. This means that methodological choices made need to yield rich data that capture subjective service experiences in and beyond the service setting and the full scope of the affective, cognitive, emotional, social and physical aspects of the subjective responses.

Table 1. Overview to used methods in general experience research.

Method	Example author	Context	What kind of results methods yield?	What typology of experiences does it imply?
Customer stories	Ponsignon et al. (2015)	Healthcare	Provided opportunity to explore the descriptions of customer journeys and evaluations of experiences from the perspective of a customer. Outcomes were related to direct interactions, indirect interactions, independent processing and speed and medical outcome.	Phenomenological/ process-based characterization
Questionnaire based on literature review	Gazzaoli et al. (2013); Chauhan & Manhas (2014); Verleye (2015)	Restaurants; Civilaviation; New product and service development	Revealed what kind of factors are influencing to customer experience and what aspects of customer experience customers valued most. Revealed experience co-creation dimensions and dimensions of customer experience in studied context. Does not reveal experience specialties in the studied context.	Process-based/ oucome-based
Questionnaire based on empirical qualitative study	Klaus & Maklan (2012); Edvardsson et al. (2011)	Mortgages	Dimensions of service experience were able to explore through interviews and findings were able to validate through questionnaire. Holisctic understanding of customer's validation of experience, but eg. social environment could not been able to confirmed through quantitative study.	Phenomenological/ process-based characterization
Open-ended Interviews	Teixeira et al. (2012); Surachartkumtonkun et al. (2015)	Multimedia services; Service encounter rage	Teixeira et al. (2012): Revealed holistic and dynamic nature of experience. Conclusions on customer activities that influence on experience co-creation were able to make. Customer journey and designed service clues were able to map. Surachartkumtonkun et al. 2015: Used Critical incidence technique and therefore emotions were emphasized. Revealed the dynamic nature of the experience.	Phenomenological/ process-based characterization

2.2 Methodologies and particular challenges to study children's experiences

Children are a vulnerable group to study (Burns & Grove, 2001, pp. 166), which causes some challenges and obstacles to the methodological choices. Children's feel stress more easily than adults in research situations, and it is more difficult for them to understand what it means to participate in a study (Kortesluoma & Nikkonen 2004). That is, children might not fully understand all of the information about participation rights and purpose of the study. The research process can harm the child by causing emotional distress, as they need to reflect the experiences they have lived through. Therefore, it is important to assess if the potential risks of causing harm to the participants of the research can be avoided (Saunders et al., 2009, pp. 186).

In addition to afore mentioned challenges, the group of study and sensitivity of the subject may cause some issues that researchers need to overcome to gather data from the children's experiences (Burns & Grove 2001, pp. 166). For instance, the developmental stage of the children may cause issues in conducting the data collection (see eg. Forsner et al., 2005). That is, for example if actor of interest is infant or in low developmental stage, the experience description can be only accessed via the infants' carer as infant is not yet able to generate words.

Table 2 summarizes a set of methods that have been applied to study children's experiences. Presented methods are selected from preliminary investigations of methods to study children's healthcare experiences from pediatric healthcare research streams.

Table 2. Overview to used methods to study children's experiences.

Method	Example authors	Results	What typology of experience does it imply?
Quantitative questionnaires	Valkenburg and Soeters (2001); Freed et al. (1998)	Results implies is does experience turn to satisfaction and what children see as positive-negative experiences.	Outcome-based experience
Structured interview	Carney et al. (2003); Kortesluoma & Nikkonen (2004)	Efficient method to collect data from chosen topic	Outcome-based characterization/ process based
Narrative interview	Forsner et al. (2005);	Young children have difficulties to describe their experiences. More developed children do not have this problem.	Phenomenological
Visual methods	Carney et al. (2003)	Appropriate to capture the dynamic nature of the experience.	Phenomenological/process-based
Mixed method (drawing and interview)	Kortesluoma & Nikkonen (2004); Sartain et al. (2001);	Drawings supported the interview and presented matters that children kept in great importance. Feelings and emotions were better brought up during the later interview.	Phenomenological
Mixed method (interviewing with roleplaying and playing with toys	Curtis et al. (2004)	Roleplaying and playing with toys were more appropriate for teenagers.	Process-based

The nature of experiences as complex and subjective clearly governs the method choices made in previous studies. Bate and Robert (2007, according to Ponsignon et al., 2015) even suggest that experiences "can never be observed or accessed directly, but only indirectly through the words and languages people use to describe it when they look back at it". This suggests/argues that qualitative methods are more appropriate for studies that pursue capturing the phenomenological nature of the experiences.

Many of the conducted research rely on mixed methods that combine visual methods and interviews (see table 1). Especially for younger children visual methods may be an easier way to present their experiences than interviews as their story telling or dialogical skills have not developed to a stage that makes pure interview possible.

3 METHODS TO STUDY EXPERIENCES : 4 CASES ON CHILDRENS' PEDIATRIC HEALTHCARE EXPERIENCES

In order to conduct a methodological comparison of methods an extreme case strategy was chosen (Patton, 1980, pp. 105). For the study, we conducted empirical study in a special experience context of children's healthcare to test methods capturing children's experiences. Selection of the case based on its complexity of customer journeys and extremeness of the experiences (strong emotions, stress, unclear future, expectations towards care). Moreover, participation of the parents, experts of their child, also makes children's healthcare experiences interesting subject to study in methodological perspective. Study was conducted in the LAPSUS research project that studies the experiences of child patients and their families in the context of children's hospital. The research project is part of the New Children's Hospital 2017 project in the capital area of Finland, Europe, aiming to help in building the world's best children's hospital.

Within the case a maximum variation sampling (see eg. Patton, 1980, pp. 105) was chosen to obtain further in-depth information on different methods to study children's healthcare experiences. To gain a detailed understanding of the key characteristics of the methods and their respective benefits for children's experience research four methodological subcases were chosen: probes including video diaries with children (case 1), narrative interviews with patients' parents (case 2), semi-structured interviews with pediatric healthcare professionals (case 3) and paper-based questionnaires with the parents (case 4). Therefore, both qualitative and quantitative methods were used. When the LAPSUS project was started little was known about the experiences of the child patients and their families. Further, theories concerning interpretations of experiences in the healthcare context was in nascent stage. Qualitative research approach was chosen to create a better understanding of the phenomenon, healthcare experience, and to gather rich data about it. Using quantitative research design first in explorative studies in a field of little previous research would be problematic, as the quantitative measures would have almost certainly an ambiguous relationship to the phenomenon (Edmondson & McManus, 2007). The quantitative part of the study was designed based on findings of children's healthcare experiences and factors influencing to the experience and understanding from the qualitative studies presented in the literature.

Methodological studies were conducted in Finland, Europe in 2015-2016, and they represent four subcases (see Table 3). Participants for the cases were employees and customers of two public hospitals: Children's Hospital (part of Helsinki University Hospital) and Pediatrics of Oulu University Hospital. Cases of the study are presented in table 3.

Table 3. Cases in this study: 4 different methods.

Case/Subcase	Method	Participants n	Participating group
Case 1	Probing	14	Children age of 10-16
Case 2	Narrative interview	25	Parents of an ill child
Case 3	Semi-structured interview	23	Healthcare professionals
Case 4	Survey	67	Parents of an ill child

In case 1 probing method was used to study 10-16 year old children's experiences. When research is conducted with children the focus is typically on their parents, even though it is clear that their opinions about health care may differ (Savage & Callery, 2005). During the LAPSUS project one aim was to find out how children express themselves and what children say about their healthcare experiences in their own words. Therefore, the participants were chosen from an older age group, 10-16 year old children. As mentioned earlier, children are more vulnerable while participating in a study and thus more attention was paid on choosing an appropriate method: probing through video diaries. Probes are meant to inspire the respondents, by making and crafting the probe tasks elicit reflections on the experiences of the participant (Gaver et al., 1999). The probe tasks were designed in a way that allowed the children to respond both verbally, visually and through action since it was thought to ease the expression of their feelings (Sanders & Dandavate, 1999; Wensveen, 1999). It was also hypothesized that the playful approach of the probe would enhance the motivation to participate (Mattelmäki & Battarbee, 2002) and the use of a probe would reveal otherwise hidden knowledge about chronically ill children. In this study, the

classic version of a diary was modernized into a video diary. Nowadays children are used to watch and produce video clips to Youtube so the data gathering process is not unfamiliar for them.

Nurses of the Children's hospital contacted initially potential outpatients with chronic illnesses (rheumatism, diabetes or gastrointestinal disease). Children interested in the study received a probe package which consisted of a tablet, a binder with tasks and instructions, 3 story cubes, and a marker pen. The participants were asked to daily record video clips on given themes for the next 9 or 10 days. Within 2 weeks after returning the probe packages the participants were interviewed (for detailed description see Karisalmi 2016). The gathered data was rich both verbally and visually.

In case 2, narrative interviewing method was used to study the healthcare experience from family's perspective. The narrative interviews were conducted with parents of the ill child that was cared in the pediatric hospital. This method was chosen partly because it tackles the ethical challenges in interviewing a child patient but gives secondary experiencers' view on child's healthcare experience. Narrative interviews reveal the storyteller's experiences in a story form that is built up by meaningful events that takes place in different places and times. This allows a researcher to examine the experiences holistically.

Case 3 utilized the semi-structured interview method to study the experiences of the families from the service providers' perspective. The use of semi-structured interviews enabled researcher to focus to a particular theme and to add depth to interviewees' answers (Saunders et al., 2009, pp. 324). The focus themes in healthcare professional interviews were children's healthcare experience and patient journeys.

Case 4 utilized a survey method to gather experiences of families visiting the Children's hospital. The survey instrument was iteratively developed in the LAPSUS project was targeted for the parents. In the future digital surveys were seen as tools for systematically gathering continuous feedback in the Children's hospital.

The first version of the survey instrument was a paper-based questionnaire that included 67 experience statements. The used experience statements were defined based on the analysis of narrative interviews with the families. The themes included success of care, arrangements of care, hospital personnel, attitude towards illness, support and arrangements in everyday life. The survey method was chosen as it enabled gathering of data from large amount of people and supported the further development of the instrument. The context of the study was an outpatient clinic and the questionnaires were delivered to the parents by the researchers and the nurses.

The different methodologies to examine experiences of children in a healthcare context were analyzed through two phases. First, the methodological sub-cases were analyzed within cases. Within case analyze revealed particular characteristics for the methods and which kind of information they yield in general. Second, methodological subcases were cross-case analyzed to compare the methods and this analysis phase brought forward relevant differences between cases. The results of our analysis are presented next.

4 RESULTS: DIFFERENT METHODS TO STUDY CHILDREN'S HEALTHCARE EXPERIENCES AND COMPARISON OF METHODS

Captured data collected from different methods varied capturing differing views of the phenomenon of children's healthcare experiences. This sections presents results from the methodological cases concentrating on how methods comprised the children's healthcare experience phenomenon and benefits and limitations of the used methods.

Probing method

Data collected through the probing method was verbally and visually very rich. It revealed otherwise hidden insights about chronically ill children's thoughts (see Karisalmi 2016). The probing method also revealed the children's healthcare experiences in the home settings and other locations beyond service providers' control.

On the other hand, the sensitive surrounding may have influenced the willingness to participate and the probing method felt strange or too laborious to some of the participants but were willing to complete the probe. As all participants were highly motivated to complete the probe it can be argued if the collected data is biased. That is, the collected data represent only views of the most motivated children leaving children, for instance, in regression outside of research method. In addition, some technical difficulties occurred during the probing period, for instance noise, dim light, and accidentally deleting of video clips that caused minor issues on analyzing the collected data.

The sampling of the study had also issues. Majority (59%) of the asked informants rejected to participate to the study for example due to lack of time, strength and motivation to participation but at the same time the rejection could not be linked directly to the chosen method. Especially teenage boys were unmotivated to participate to the study. Therefore the whole situation of the child (state of the illness, school, hobbies, family and friends) has to be taken better into account while the recruitment process and when choosing the probing moment.

Narrative interviews with child patients' parents

Narrative interview captured the dynamical and multiparty nature of the children's healthcare experience. Interviewees were able to describe how their stories how they navigated through their patient pathways, which kind of actors they met during their pathways, which kind of emotions did arise during the encounters. Importantly, interviewees were able to posit the experiences to a context and describe the meaningful events that emerged during the pathways.

Narratives were also found to be very suitable to examine the experience creation beyond the service setting. Self-care has a great role in pediatric healthcare and narrative interviewing method captured well these experiences that were created in child patients' home, school or kindergarten and other settings beyond the healthcare service providers' settings.

Children's healthcare experiences are greatly influenced by imagined future experiences and scenarios, for instance, how the future will be with the illness and how the illness will transform the body of the patient. These imagined experiences were able to collect via the narrative interviews.

The sentimentality and emotions linked to the children's healthcare experiences were able to capture with the narrative interviewing. However, narrators emphasized the negative experiences during their patient pathways. For researcher, negative experiences are rich source to examine the experiences as it includes the expectations that the informant had before the encounter and the experience that the informant had compared to the expectations.

Narratives for parents revealed the experiences of children and narrators were able to describe those experiences. Parents act as an expert of their own child and his or her feelings. Limitations concerning the narrative interviewing method is that without the observations of actual encounters the researcher cannot recognize the factuality of the events. Furthermore, some participants felt it difficult to go through their experiences and therefore ethicality of the

study have to be considered.

Semi-structured interviews with healthcare professionals

Semi-structured interviews with healthcare professionals captured a generalized view of children's experiences as healthcare professionals had several year experience in the pediatric healthcare and they have seen many patients during that time. They answered to the topics on children's healthcare experience in their viewpoint, meaning that experience creation in the service setting did have a great deal in their answers and especially doctor-patient or nurse- patient encounters. On the other hand, the interviews described poorly experiences that were created beyond the healthcare service provider's settings and captured only narrow part of the experience.

As informants were not patients or customers of the experience, the subjectivity of the experience could not be captured with used method. Therefore, semi-structured interviews are seen appropriate to study experiences from process-based perspective and management of experiences.

In addition, pediatric healthcare professionals may have been biased as they describe children's experiences. Interviewees did not share any of their own service co-creation errors in the interviews but other healthcare professional's errors were shared.

Surveys with patients' parents

For researcher the access and reachability of the patients in pediatric healthcare can be challenging but surveys provide a quick method to inquiry about the experience as they occur. Participants - parents of the child patients - were easily reached from the outpatient clinic waiting area and many of the them were willing to participate. Compared to other methods the participation to the study is not time consuming and participants had time to fill the surveys while waiting for the appointment. By a survey method we were able to support the findings of qualitative methods in a convenient way.

Capturing experience with surveys always include some challenges. Firstly, researchers conducting the research need to have in-depth knowledge of the phenomenon that the aspects of experience most relevant in the studied context are being surveyed. In addition, the statements or questions of the survey need to be carefully formulated so that informants interpret them similarly.

Second, as experiences are dynamic in nature and therefore old experiences are updated by newer experiences the timing of the survey need to be carefully planned. Researchers need to consider in which points of the customer journey the survey can be conducted and which type of questions can be asked in those touchpoints.

Summing up and comparing methods

Probing method was the only method that revealed truly the subjective experiences from the view point of children (see table 4). Although, results drawing from narrative interviews with parent and semi-structured interviews healthcare professionals yielded information about the phenomenon itself it does not describe truly the child's personal interpretation.

Probing method and narrative interviews both revealed the dynamic nature of experiences. Patients and their parents both described their patient journeys and how previous experiences have influenced to latter experiences. Semi-structured interviews with healthcare professionals described situations where child patients have had a bad previous experience that has yielded a trauma or patient pathways where routine has build up based on the previous experiences and have influenced to latter experience co-creation situations.

Table 4. Lessons learnt from methodological cases on children's healthcare experiences.

Method	Benefits	Limitations / Challenges	Considerations in using the method and Implications for researchers	Which facets and dimensions of experience phenomenon do methods comprise?
Probing method with child patients	-Verbally and visually rich data was gathered. -Revealed otherwise hidden insights about chronically ill children's thoughts. -Participants preferred this method over interviews/surveys and appreciated they could use the time necessary in their own home.	-Sensitive surrounding > not all had the time/strength/motivation to participate, hence a high rejection rate of 59%. -Difficult to motivate especially teenage boys to participate. -Some found the method strange or too laborious. -Technical difficulties occurred (noise, dim light, accidentally deleting of video clips). -Bias possible since all participants were highly motivated?	-How to motivate children and teenagers even better? -How to make it easier/more convenient to participate? New channels? -The whole situation of the child has to be taken better into account when choosing the probing moment (state of an illness, family, friends, school, hobbies, etc). -Useful in exploratory studies approaching children's experiences as a phenomenon.	-Captured subjective and dynamic interpretations of an experience in studied context. - Captured temporal, factual, locus, spatial dimension and organization dimensions. -However, it is hard to evidently show which of the experiences were actually lived and how accurate the descriptions of actors participating to experience co- creation was.
Narrative interviews with child patients' parents	-Parents were able to describe child's experiences. -Captured the dynamical and multiparty nature of the child's experience. -Customer journey can be captured. -Captured experience co-creation in service setting and beyond it. -Development of emotions was well described. -Imagined future experiences was well described during the interviews. Parents concentrated also to the child's future which caused negative emotions. -Negative experiences were emphasized.	-Without observations of actual encounters it is difficult to divide lived and imagined experiences. -Some participants felt it difficult to go through their experiences.	- Should adult interviews be used when context of the study is sensitive as the description of experiences were similar to childs? - If study approaches the phenomenon from process perspective adult interviews may yield more accurate picture of customer journeys. - If the subject of the study is sensitive the imaginary future experiences may be enhanced. -Experiences may have been a different meaning during the passed time in parents mind. - Useful in exploratory studies concentrating children's experiences in sensitive contexts and studies that aim to map the child's customer journey.	- Captured experience from experts point of view. Dynamic nature of experience was able to verify. Subjective experience was not captured. Emotions were emphasized. - Captures all dimensions of experience co-creation. Especially, spatiality of the experience. The line between actual lived experiences and imagined experiences cannot be clearly defined.

Semi- structured interviews with pediatric healthcare professionals	-Captured generalized view of children's experiences. -Useful in studies concentrating on children's experience co-creation management and co-creation processes. Informants were able to describe the clues that made positive effect on child's experience.	-Poorly describes the experiences beyond the service setting. -Subjectivity of the children's experience was not captured. -Pediatric healthcare professionals may have bias to tell about children's experiences.	-Useful in studies concentrating on service clues in children's context. - Not useful if large part of child's experience co- creation happens beyond the service setting.	-Captured generalized children's experience. Therefore, subjective experience was not captured. Poorly describes the dynamic nature of experience, temporally very short time frame. -Concentrates on in service setting experience co-creation. Organization and control dimensions were described. -Do not capture factual, locus dimensions
Survey with child patients' parents	-Participants were easily reached from the waiting area -Many parents were willing to participate -While waiting, the parents have time to fill the surveys -Results gave support to findings of qualitative methods. -Validation of different facets of experience can be easily measured	-Timing of the study (e.g. when inquiring about the appointment related experiences when the survey should take place?) -Identification of the core healthcare experience statements: What are those aspects of experience, which are the most relevant in the studied context of use? -The statements / questions need to be carefully formulated so that they are interpreted similarly	-Useful in studies approaching families' experiences as an outcome. - It should be always considered if the survey of adults is applicable in children's context. -Surveys with young children need an adult to participate if they can't read the questions. This may cause biased data.	-Does not really comprise the phenomenon but valued attributes of it.

Narrative interviews captured all dimensions of children's experience co-creation. Probing method did yield similar data but was lacking information on how the control of experience co-creation of the actors participating to patients life varied. However, there are few methodological issues concerning information on experience dimensions. First, concerning the factual dimension of the experience co-creation. It is hard to evidently show which of the experiences were actually based on lived encounters and which ones were imagined by the participant as they recall the events. Without actual observations of customer journeys it is extremely hard to tell the line between actual lived experiences and imaginary experiences.

Both narrative interviewing with children's parents and probing method yielded information from children's experience co-creation beyond service setting. The conduction of probing method beyond service setting may even encourage children to inform their experiences beyond service setting than study methods that are conducted within the service setting.

Narrative interviews yielded data that revealed the complexity of experience journeys; families moved from beyond the service setting multiple times to the healthcare service providers settings and back to beyond. Moreover, the data revealed experience co-creation with other actors participating to experience co-creation (eg. kindergarten, school, hobbies etc.) that, besides the probing method did not reveal. However, the semi-structured interviews with pediatric healthcare professionals revealed well the organization and control dimensions of the children's experience co-creation.

Narratives and probing revealed the broad timeframe of experience co-creation but semi- structured interviews only revealed a short period of the whole customer journey. Therefore, provider experts in the children's experience studies may describe only a part of the child's experience. Furthermore, narrative interviews with parents revealed the development of children's and parents' emotions during their service journeys.

The surveys with child patient's parents differed from other used methods as the development of the instrument draw from the results of the previously mentioned qualitative studies. The method enabled the identification those aspects of experience, which are relevant for the particular context and touchpoint of the journey. The finding was based on a fact that the participants did not find all the statements in the questionnaire relevant to be answered in the context of outpatient visit. This implies that the method can be used to find out how the families of child patients interpret and value attributes of the experiences.

5 CONCLUSIONS AND DISCUSSION

Key findings & Contributions

Study was conducted to provide knowledge on methods to study children's experiences that, before this study, were remained unstudied. Even though, recent literature on service experiences have regarded experiences as complex topic to study as they are subjective, dynamic, and unique interpretations of events and dependent on many personal and contextual factors (Zomerdijk & Voss, 2011). In addition to need of capturing experiences in the contexts of value co-creation while taking dimensions affecting to experience co-creation into account (Jaakkola et al., 2015). This paper build contribution by increasing understanding on how different research methods capture facets of children's experience including nature of the phenomenon and dimensions of children's experience co-creation.

This case study seek to examine the methods to capture children's experiences and to provide comparison between four purposefully selected methods and the ways they capture the phenomenon. Key result of this experimental case study on methodologies capturing children's experiences was that information on children's experience phenomenon varied notably.

Probing method with children captured the subjective and dynamic nature of the children's experience and almost all dimensions of experience co-creation except control dimension. Probing method was also well revealing the experience co-creation beyond the service settings, in child's everyday life. Narrative interviews with child patients parents comprised the children's experience phenomenon similarly as the probing method although it did not yield an subjective interpretation of a child. However, it captured the complexity of experience journeys and emotions of children and parents related to stages of the journey better than probing method.

Therefore, our study revealed that probes with children and narrative interviews with children's parents are well appropriate to study the phenomenon itself. These methods are suitable for researchers following phenomenological characterization of experience typologies (Helkkula 2011). Study also contributes to dimensions of service experience presented by Jaakkola et al. (2015) in special setting of children by showing two examples of methods that captures presented dimensions. Methods also comprised the hidden customer events that were beyond the organizations that may be difficult to recognize by the other methods used in the experience research (Banerjee, 2014).

Semi-structured interviews with service providers comprised a generalized view on the experience phenomenon. Information captured with this method concentrated mainly to very short timeframe of the experience co-creation (experiences co-created in service setting) and therefore did poorly described the whole phenomenon. It however gives rich information on clues and stimuli provided by service providers and is useful especially if experiences are approached from process-based point-of-view.

For researchers following process-based and phenomenological approach we however suggest combining probing with children or narrative interviewing with parents to interviews with service providers. Service provider interviews yielded a detailed information about clues that service providers send to their child customers and a generalized view on how the children percept those clues but did not reveal the experience co-creation in children's everyday life setting. Probes and narratives tackles this issue and gives rich and detailed information on the perception of experiences. Therefore, by combining the methods researcher may access and capture all spheres of value co-creation (Grönroos & Voima, 2013).

Survey method were seen appropriate and useful to verify the results of qualitative findings of children's experience phenomenon. This result is in line with e.g. Klaus and Maklan (2012) and Edvardsson et al. (2011) and shows that surveys are suitable to validate qualitative study results also studies with children.

Implications to researchers and practitioners who conduct experience research

This study help researchers interested in studying children's experiences to select an appropriate methodology for conducting their research.

Probing method were seen very applicable to exploratory studies on children's experiences that approaches the experience as a phenomenological sense. However, the whole situation of the children have to be taken into account when choosing the probing as a method. As the method is very time consuming for participants to complete, children in school and with many hobbies may not have time to complete the probes. We also noticed that in this sensitive subject of children's illness, some of the children were unwilling to participate as they did not want to talk about their illness.

If study approaches the phenomenon from process perspective adult interviews may yield more accurate picture of child's experience journey. Parents of the child seem to remember the touchpoints and encounters better than a child, which helps researchers to map, especially long, experience journeys. However, researchers should notice that if the subject of the study is sensitive, the imaginary future experiences may be enhanced. For afore mentioned reasons the narrative interviews with child's parents are useful in exploratory studies concentrating children's experiences in sensitive contexts and studies that aim to map the child's customer journey. Therefore, researchers interested in studying children's experiences should consider if the subject of a study is sensitive in nature should the study be conducted with parent interviews.

Interviewing with provider side professionals is appropriate method to approach children's experiences if researcher wants to concentrate on the service clues or stimuli offered by the provider. However, use of the method should be considered if large part of the child's experience co-creation takes place beyond the service setting. If used situations like that, it could give too narrow picture of the experience.

As in general experience research survey method approach is useful when researcher approaches experiences as an outcome. However, the timing of the survey need to be carefully planned and the contents of the instrument carefully formulated in order to be able to research the experience as it appears for the participants. Our study however showed that researchers should consider if the survey used to study family experiences from the perspective of adults is applicable to collect information on children's experiences as well. Furthermore, researchers should consider if survey approach is suitable for inquiring about children's experiences considering their limited capabilities of identifying and expressing experiences and feelings. Conducting a survey with child participants may cause biased data as they may need an adult to participate to data collection and translate text or question in other format for children. In addition, quantitative research on children's experiences may need special approach and applications to collect the experience data such as participatory and collaborative research methods, pictures and audio.

Limitations and Future Research Agenda

We admit that there are limitations concerning the chosen methods used in this study. First, positing adults as informants of the children's experiences and children's as objectives of the study has issues. Although information gathering from adults can be more practical it can not capture the subjective experience of children. Children's view on world, experiences and meaningful events differ from the adults'. However, our study showed that in the healthcare context the difference between teen patients experiences and their parent's experiences did not differ dramatically. Second, our findings may not be universally applicable as there might be cultural and societal differences in conducting studies. Thirdly, our study concentrated only to four purposefully selected methods and therefore does not give a thorough knowledge on all methods that could be used in children's experience research.

The probing method tested how the diary method could be updated to this day with technology. Future research on methodologies on the children's experiences could test how technologies and interactivity can be used to tackle the issues in collecting children's experiences, for example developmental stage of the language and reading and supporting the ability to tell stories. These could be supported for example by using interactive semi-structured visual methods to support the story telling.

Tests of the probes in children's experience research also revealed serious issues with motivating the children to participate. Therefore, further studies are needed to learn how to motivate children to participate to research even better. Papers concentrating on tackling these issues could study methods to make the participation of children easier and more convenient by searching new channels to conduct the studies (see Karisalmi 2016).

Interesting future topics to explore would also be how the temporal dimension influences to methods and to yielded results. As narratives are always retrospective stories based on the memory of the interviewee, it may influence the yielded results and perception of the experience. For example, passed time and upcoming events may have altered the meaning of some event or emotions linked to that as interviewee has posited the experience to a broader context. Interviewees therefore may underline different facets of the experience phenomenon on different temporal points of the customer journey. Therefore, it would be interesting and important to conduct longitudinal studies comparing different temporal points and collected information. Furthermore, as emotions are particularly important factors of experience in healthcare (cf. Bolton et al., 2014). Future research should examine how and by which methods the emotional side of the experience could be revealed most accurately in different temporal points over the experience journey.

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