Hidden Resources: The Messy Way to Resilience

Sabrina Lisi[1] ⬥

Abstract

All individuals have similar psychological needs like experiencing self-efficacy, pleasure, or attachment (Epstein, 1993; Grawe, 2006). The way to get those needs met, however, is sometimes messy, especially when vulnerability is high. While the concept of hidden resilience has been introduced two decades ago (Ungar, 2002), *hidden resources* or more precisely *hidden affordances of resources* within hidden resilience seem to be rather un-explored. Conceptualising hidden resources allows to extent and strengthen the social ecological perspective of resilience, wherein factors and processes of resilience are conceived as contextually dependent. Hidden affordances (Gaver, 1991; Gibson, 1979) of resources can be understood as the nonconventional behavioural patterns used on the path facilitating (hidden) resilience, hence, a resource is equipped with different qualities that are compatible with and relevant for the individual's psychological needs. Vulnerable children might be securing resources, helping them to stay healthy, by being angry, even aggressive. Various studies (Kassis et al., 2018; Sroufe et al., 2010; Ungar, 2002; Ungar et al., 2013) are in line with a view, indicating that resilience processes are rarely linear or ideal, in the sense that only the pure self-beneficial or socially accepted resources are navigated to. By acknowledging messy resilience processes, we sharpen the view towards hidden resilience and hidden (affordances of) resources which allows us to take off our conventionally tinted resilience-glasses and recognize various resilient ways of life. The conclusion opens the field of vision regarding successful adaptation to adverse situations and provides added value for educational sciences and therapeutic areas.

Keywords Resilience · Hidden resources · Navigation · Affordances · Vulnerability · Psychological needs

✉ Sabrina Lisi
   sabrina.lisi@fhnw.ch

1 Pädagogische Hochschule FHNW, Campus Muttenz, 8. OG West Hofackerstrasse 30, 4132 Muttenz, Schweiz

⧍ Springer

Introduction

Imagine colourful playgrounds, free libraries, affordable cinemas, healthy loving adults, well-funded schools with supporting teachers and opportunities for being creative, doing sports and interact joyfully with peers—this scenario feels anything but *messy*, I guess. Even in an environment rich in resources like the one just described, a vulnerable child would not automatically recover from adverse experiences, however, the chances the child might become resilient are quite good. Nonetheless, reality sometimes looks different, probably messier, lacking at least one or the other resource, and messy environments probably call for messy measures. For no matter how poorly an environment is equipped with resources, vulnerable children are still trying to get the best out of it: The neglected child who through being angry, loud, and seemingly out of control catches the teacher's attention, might be securing a crucial resource for themselves in order to stay mentally healthy.

While the concept of hidden resilience has been introduced two decades ago (see Ungar, 2002), *hidden resources* or more precisely *hidden affordances of resources* within hidden resilience seem to be rather unexplored. Conceptualising hidden resources allows to extent and strengthen the social ecological perspective of resilience, wherein factors and processes of resilience are conceived as contextually dependent. Therefore, by interacting with social and physical ecologies unique developmental outcomes are created (Ungar, 2012) which is why "Resilience can mean very different things to different people in different places" (Ungar et al., 2013, p. 4).

Whereas hidden resilience focuses on nonconventional outcomes of vulnerable individuals, emphasising a developmental path sometimes involving years to be acknowledged as such (Ungar, 2002), hidden affordances of resources can be understood as the nonconventional behavioural patterns used on this path facilitating (hidden) resilience. The neglected child from above used nonconventional behavioural patterns—being angry, loud, and behaving out of control—to meet their need to belong or to feel self-efficient which eases the way to resilience. Since scholars so far have not provided a conclusive model describing the complex relationship of risk factors and resources within cases where vulnerability is high and the same experience cannot only not function as a risk factor but serve as a protective resource, a theoretical framework like the following seems long overdue. I would like to explain the hidden resilience phenomenon, where vulnerability is high, resources are scarce and unconventional resource navigation is quite likely, through the conceptualisation of *hidden affordances of resources* or in short *hidden resources*.

The *affordances theory*[1] developed by Gibson (1979), yet unfamiliar within the field of resilience research, appears to be a striking concept to explain how the same thing in the environment is recognised, navigated to, and negotiated on differently by individuals interacting with it. The very aspect of *hidden* within the terminology *hidden affordances of resources* involves an extended understanding of resources: *(i)* A resource is something or anything in the environment (people, institutions, objects, etc.) *(ii)* that can be navigated to and interacted with in different ways *(iii)* and affords different benefits depending on the needs of the individual interacting with it. The third point of the extended understanding of resources refers explicitly to the part of *how* something in the environment can become a resource. To describe this matter more precisely, I suggest using the term *affordances* (see

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[1] The inspiration to conceptualise hidden resources through affordance theory derives from a discussion with philosopher Dr. Andreas Cremonini—thank you.

Gibson, 1979) of resources. Meaning a resource is equipped with different qualities, assets, or affordances. What is more, these affordances can be hidden, perceptible or even false (see Gaver, 1991) as will be discussed further.

Gibson's (1979) idea, that it is primarily the interaction of an individual with (something in) the environment that reveals its (hidden) affordances is transferred to the concept of resource navigation within resilience research. At the very beginning of a resilience process therefore stands the identification or recognition of a resource as such, or more specifically its affordances that can be understood as the resource navigation. It might come across as quite complicated and technical, however, it simply means anything can serve as a resource as long as it meets a basic psychological need like the need to belong, the need of experiencing self-efficacy and meaningfulness, experiencing control or pleasure (see Epstein, 1993; Grawe, 2006). Within this approach it becomes clear that the perceived affordances of a resource—and subsequent behaviour—might only be suitable for that very individual and maybe only in that very situation. Hence, what sort of affordances a vulnerable individual might recognise, especially when resources are scarce, can therefore hardly be predicted, however, the resilience process can be acknowledged and accepted.

This approach allows to perceive resilience as a successful navigation of (mental) health-maintaining resources that can be found within *every environment* like people, institutions, objects, or other things. These *things* in the environment unveil their protective nature due to different affordances anticipated by the individual interacting with them. The less an environment provides conventional, meaning socially accepted resources (parental attachment, supported activities from family and peers or availability of educational opportunities, see Steinebach, 2013, p. 63) the more creative individuals become identifying affordances meeting their needs. This more creative part of resource navigation builds the very core of hidden resources that promote hidden resilience. Ungar (2002) stresses that nonconventional forms of behaviour leading to a nonconventional navigation of resources are just as important when studying resilience in at-risk youth and children as the conventional navigation.

What is more, conceptualising hidden (affordances of) resources enable researchers to address and explain different paths of childhood and youth development, especially when vulnerability is high. By looking at resources as things in the environment with different, sometimes hidden affordances which reveal their purpose whilst interacting with them permits researchers to better understand the concept of hidden resilience and resilience in general. This shifts the common perception of resource navigation as a conscious and purposeful to a rather random, more intuitive act which serendipitously can lead to hidden (affordances of) resources and resilience. Adopting this approach could therefore help discussing the question, why one vulnerable person is (considered) more resilient than another. The conclusion offers preliminary suggestions to the concept of resource navigation of vulnerable youth by opening the field of vision regarding successful adaptation to adverse situations. Which then provides added value for educational sciences and therapeutic areas, i.e., for teachers, social workers, and therapists.

Resilience: A Social Ecological Phenomenon

The phenomenon of resilience, or at least outcomes which are considered resilient, are subject to social conventions and can therefore be understood as social constructs (see Ungar,

2004). Once acknowledged that the expected outcomes of resilience are conventionally shaped, it is no longer surprising that the concept of hidden resilience, where problematic behaviour at times is considered as a sign of resilience, and the role hidden resources play in that part, has not had a lot of attention, and is not fully explored yet.

Let us take a step back and first look at the definition of resilience. In a broad sense resilience can be defined as "the capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development" (Masten, 2014, p. 6). Against the background of existing vulnerability, which suggests a negative course of development, the positive development can thus be characterised as *unexpected* or *against all odds*. It is precisely this circumstance that motivates scientists and still makes resilience research thrive. The fact that we are at a point today where we can address and discuss hidden resilience is due to the constant development of the resilience concept and its definition. While in the middle of the 20th century a rather pathogenic view of development processes prevailed, the focus increasingly no longer remained on what makes people ill but on the circumstances that keep them healthy. Even within this new perspective, shifts took place that led to new resilience models and replaced one-dimensional, often dispositional approaches. Hence, the multi-causal, interactionist and dynamic quality of resilience processes is emphasised through and through (see Kalisch, 2017; Wustmann, 2005).

Throughout these definitions it becomes clear that vulnerability and resilience are closely related conceptually, they refer to one another (Masten, 2001). Hence, only individuals who exhibit vulnerability, can be resilient. Therefore, a successful development without exposure to significant adversity would not be considered a resilience phenomenon. The conceptual complementarity of vulnerability and resilience gets repeated when looking at the relationship of risk factors and resources (Rutter, 1990): The concept of vulnerability includes the identification of risk factors, the concept of resilience on the other hand includes the identification of resources; the more risk factors an individual is exposed to the more resources are required in order to counteract the vulnerability and enable resilience (see Kronig, 2007; Lisi, 2020; Wustmann, 2005). Although this approach seems plausible, the aspect of subjective appraisals of both risk factors and resources (due to different affordances) has still not been included in past research.

Incomplete Concept of Resources and their Navigation

So far, a vast number of resources associated with facilitating resilience has been identified and classified. The following six groups of resources allow to get an overview on the underlying criteria of what is considered to be a resource: (1) *resources within the person* (e.g. self-efficacy and social competence), (2) *resources within the family* (e.g. well-balanced attachment and positive communication), (3) *resources within the educational system* (e.g. good relationship with teachers and pedagogical skills), (4) *consulting as a resource* (e.g. availability of low-threshold offers and well-structured offers), (5) *resources within leisure-time* (e.g. supported activities from family and peers and peers accepting social rules), (6) *resources within society* (e.g. availability of educational opportunities and high permeability of the educational system). A full list of identified resources can be found in Steinebach (2013, p. 63) who referred to Benson & Scales (2009) as well as Schellenberg & Häfeli (2009).

I would like to highlight three aspects on the above-mentioned resources: *Firstly*, the list above, though seeming extensive, only represents a small selection from a large set of identified resources, in turn this means that there are a lot more (see Benson & Scales, 2009; Schellenberg & Häfeli, 2009). *Secondly*, the list of identified resources only contains conventional and therefore socially accepted resources. However, as mentioned above and as will be discussed further, the concept of hidden resilience stresses that nonconventional forms of behaviour leading to a nonconventional navigation of resources is just as important when studying resilience in at-risk youth and children as the conventional navigation. *Thirdly*, I want to emphasise the lack of knowledge on *how* and *why* something is identified as a resource by vulnerable individuals to develop resilience—which I consider the key in understanding resilience processes.

As for the *why* on this third notion, there seems to be a rather obvious answer: All individuals have basic psychological needs such as the need to belong, the need of experiencing self-efficacy, the need of meaningfulness, the need to feel pleasure or experiencing control (Epstein, 1993; Grawe, 2006). These psychological needs are crucial, existential and want to be satisfied unconditionally. Individuals satisfy these needs through the navigation to different things in the environment (people, institutions, objects, etc.) that can be more and less socially desirable. These things again are equipped with different affordances that allow individuals to independently negotiate on whatever meets their needs to stay healthy: "Children who need help have the capacity to navigate their way to health resources, whether that navigation places them in contact with service systems or leads them to nonconventional forms of behaviour that bring equal benefits" (Ungar, 2005, p. 441). One could interpret this statement in way, where it pictures every environment as an environment of potential resources a vulnerable individual can navigate to, even when there is hardly anything to navigate to. However, to facilitate resilience it is better for vulnerable individuals to find themselves in an environment rich in (conventional) resources such as playgrounds, libraries, youth-centres, and other resources they can independently navigate to than to find themselves in a poorly equipped environment. This also accounts for why a safe neighbourhood, a good school and secure ties to caregivers explain more differences in children's developmental paths than individual characteristics of the children do (Sroufe et al., 2010). Even though it is easier for individuals to navigate to conventional resources spread out in the environment it does not hinder them to meet their needs through hidden often unconventional resources. All environments are endowed with various things that can become a resource.

Regarding the current resilience research some points seem uncontested: A richly equipped environment where autonomous resource navigation is possible is favoured over a poorly equipped environment regarding the preservation of an individual's (mental) health. The concept of resources or resource navigation mainly considers conventional and socially accepted resources that promote conformity and adaptability which makes it myopic. What is more, *how* something becomes a resource has not been fully addressed or explored yet. An extension of the current resource concepts is required. Considerations of hidden resilience inevitably lead to considerations of hidden resources, which can be recognised or indexed as such through various affordances. Introducing the concept of hidden resources therefore extents the resource concept. Before I further discuss hidden resources and affordances, I would like to lead there by looking at hidden resilience. It is a phenomenon that occurs when environments are scarce in resources and individuals become more creative in their resource

navigation to maintain health. Ungar (2005, p. 436) already described this phenomenon two decades ago and claimed youth are the "architects of their own experience", or as I would interpret it, they are prone to discover hidden affordances of resources.

Hidden Resilience

Hidden resilience focuses on nonconventional outcomes of vulnerable individuals emphasising a developmental path sometimes involving years to be acknowledged as such (Ungar, 2002). The hidden resilience approach is in line with a social ecological perspective of resilience: Resilience is primarily the quality of the environment and only secondarily the quality of the individual trying to get the best out of this environment (Ungar et al., 2013). The above-mentioned definitions of resilience cover many aspects of the resilience phenomenon. However, the question of *how* the system adapts successfully against all odds remains unaddressed. It is for that reason the focus shall be drawn on a definition of resilience which includes the *how*: "In the context of exposure to significant adversity, whether psychological, environmental, or both, resilience is both the capacity of individuals to navigate their way to health-sustaining resources, including opportunities to experience feelings of well-being, and a condition of the individual's family, community and culture to provide these health resources and experiences in culturally meaningful ways" (Ungar, 2008, p. 225). In other words, resilient individuals are vulnerable individuals who successfully navigate to and interact with health-sustaining resources –this can be done very differently, meaning, in more and less desirable, even messy ways. Ungar (2015, p. 51) emphasises that if "individuals are exposed to significant amounts of adversity, the amount of variance in positive developmental outcomes that is accounted for by the person's environment will be equal to or greater than that accounted for by individual variables" (see Abramson et al., 2010; Cicchetti, 2010; Kassis et al., 2013). When individuals find themselves in an environment rich in resources a positive disposition and willingness to take advantage of these resources can help individuals develop in positive ways (Ungar, 2015). For that, resilience is increasingly understood as the capacity of systems to adapt, rather than the capacity of individuals to overcome challenges (Ungar, 2015). A social ecological model of resilience therefore suggests that the human system helps individuals navigate to resources and negotiate for resources to be provided in meaningful ways (Ungar, 2011).

Examples of Hidden Resilience

An extreme example of hidden resilience, however, highly topical when considering the number of people fleeing their country, can be found in the report by Ungar et al., (2013, p. 4) on the memoirs of Beah (2007), a former child soldier: "Although shocking, Beah reports his anger when the help organisation took away his gun after they took him out of the combat unit. He says, he repeatedly imagined returning to his combat unit afterwards. He says that he was proud to be part of the army, fighting the rebels who had killed his parents". In this case the individual's level of vulnerability was immensely high and the number of resources provided by the environment quite low. It is hardly necessary to stress that considering the gun as a resource would barely be justified in a less vulnerable environment, situation or individual.

In another, less extreme and maybe more relatable, case study of a sister and a brother who were taken from their drug-addicted mother (Ungar, 2005), the brother later in his life is considered more resilient than his sister. Ungar (2005, p. 436) claims that the sister who seemed to appear less resilient than her brother showed a lot of angry behaviour that "secured for herself a sense of commitment to her family of origin and marked her resistance to what she perceives as the wrongful removal of her and her brother from her mother's home." Children like these two siblings "emphasize they do what they do to survive, their chaotic behaviour an accommodation to the threats they perceive from others. They navigate towards whatever success they can achieve by engaging with or resisting services as part of an elaborate dance to have their needs met" (Ungar, 2005, p. 437).

Both cases, the child soldier, and the sister, can be understood as examples of hidden resilience (Ungar, 2005): In the first case the gun functioned as a symbol or memory of belonging and pride for the lost family, and in the second case the anger of the sister served as a means to express commitment to the family she was taken from. In both examples the nonconventional, socially unaccepted, or even dangerous behaviour, looked at narrow-mindedly, could be falsely interpreted as failed children who were not able to successfully adapt to disturbances that threatened development and therefore maybe treated as hopeless cases. In fact, they managed to secure resources that kept them mentally healthy. Now, the question of *why* and *how* arises. How have they become resilient? Why exactly has the gun become a resource and how has the anger served to secure resources? In the last part of this article, I will come back to both examples, however, extending the analysis and the discussion onto hidden affordances of resources.

To sum up, the concept of hidden resilience is a rather new perspective, emphasising a social ecological view where factors and processes are conceived as contextually dependent, interacting with social and physical ecologies that create unique developmental outcomes (see Ungar, 2012). This view permits to see both risk factors and resources as matters of subjective appraisals (see Hooper et al., 2008; Lisi, 2020; Ungar, 2012; Ungar et al., 2013) which sets the ground for further investigation in the conceptualisation of resources and risk factors. Or, as I suggest, which sets the ground to introduce *affordances of resources that reveal their subjective value by interacting with them*. This makes it possible to perceive something as a resource and at the same time as a risk factor yet by different individuals in different situations. Hidden resources are revealed through interaction with the environment which is the key factor of resource navigation and resilience processes (Lisi, 2020; Ungar, 2012) as well as the very core of the social ecologies approach of resilience.

Hidden Resources

Whereas hidden resilience focuses on nonconventional outcomes of vulnerable individuals (Ungar, 2002), hidden (affordances of) resources can be understood as the nonconventional behavioural patterns used on this path facilitating (hidden) resilience. Even though the concept of hidden resilience presented by Ungar (2002) provided researchers with a larger scope and greater awareness of resilience outcomes, the circumstances of *how* and *why* vulnerable individuals identify certain resources and thus express certain behaviour, especially nonconventional behaviour, has yet not had a strong focus within resilience research.

Affordances theory (Gibson, 1979), however, still unfamiliar within resilience or resource research, provides the missing pieces in widening the scope of resilient pathways in vulnerable individuals. This by comprehending resources at first as neutral things (people, institutions, objects, etc.) within the environment whose manifold beneficial affordances only become apparent for the individual through interaction. Hence, as well as resilience "can mean very different things to different people in different places" (Ungar et al., 2013, p.4), resources do too. As already seen within the concept of hidden resilience the evaluation of a person as *resilient* is culturally and conventionally shaped and biased (Ungar, 2005). Therefore, I would like to stress that reducing resources to conventional and socially accepted ones is myopic, especially when it comes to (extremely) vulnerable individuals. This extended approach goes hand in hand with other findings observing the relationship of resources and risk factors: The same experience can therefore be regarded as excessively demanding, even as traumatic for one person and for another person as a way of experiencing self-efficacy (McMahon & Luthar, 2007). Even if it were possible for caregivers to offer children or youths exactly the same environment, from a psychological point of view it would not be experienced identically by the individuals. I conclude that hidden or unconventional resources are usually being navigated to because the context is threatening, the level of exposure high and socially accepted resources are not provided enough. It also means that the level of exposure influences what sort of affordances are recognised in things. However, there is a thin line in terms of what is considered hidden resilience, as the conceptualisation of hidden resources is not meant to be an invitation for an *anything goes*-mentality.

Hidden Resources and Affordances

Affordances indicate the functional range of a single resource. Since scientists have not yet provided a coherent model describing the complex relationship between risk factors and resources in cases where the same experience not only cannot function as a risk factor but even serves as a protective resource, a theoretical framework such as the following seems timely. Before, I claimed a lack of theoretical framework on *how* and *why* something is identified as a resource by vulnerable individuals. Regarding the *why* I concluded that all individuals have basic psychological needs that need satisfying in order to stay mentally and physically healthy. These basic psychological needs include the need to belong, to feel self-efficient, experiencing meaningfulness, control, or pleasure (Epstein, 1993; Grawe, 2006). Meeting these psychological needs will help individuals stay healthy. However, how do vulnerable individuals navigate towards resources that meet their needs? This *how* is more intriguing since so far there is no theoretical framework explaining why the same *thing* for one individual bears a threat and for the other a resource, and the other way around. Affordances theory (Gaver, 1991; Gibson, 1979), placed in a psychological context, can provide this missing theoretical framework to comprehend how (hidden) resources are navigated to within a social ecological understanding of resilience. Gibson (1979) himself called affordances theory, the ecological approach (to visual perception) where an affordance is defined as a relationship between an agent and their environment.

An abridged description of Gibson's (1979, p. 127) *affordances theory* reads as follows: "The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill. […] I mean by it something that refers to both the environment

and the animal in a way that no existing term does. It implies the complementarity of the animal and the environment." Gaver (1991, p. 79) who developed this approach further later claims "affordances are properties of the world that are compatible with and relevant for people's interactions." Affordances can be classified into three categories: perceptible, false, or hidden (Gaver, 1991). The most interesting category for this paper is the third one, the hidden affordance.

As mentioned earlier, affordances theory has had no tradition within resilience research so far. However, it is prominent within cognitive psychology and design engineering where the idea of affordances is usually linked to objects both digital and analogue, for example interfaces or door handles (see Gaver, 1991). Let us look at the example of door handles and their affordances that result from (perceptible) information regarding the shape and haptics of them. Where a thin vertical door handle implies or *affords* pulling, a large flat horizontal plate on a door implies or affords pushing. Gaver (1991) claims the interaction of an individual with an object determines its affordances, which in the case of the door handles seem perceptible and maybe even obvious. However, it is not always the case that affordances are perceptible or obvious in an object, they can also be false or hidden (Gaver, 1991).

An example to explain all three categories of affordances within one object can be found when we draw our attention to a regular wooden four-legged chair. Its *perceptible affordances* become clear as soon as we interact with the chair since different perceptible information is available resulting from the shape and haptics of it. The flat horizontal, and stable, surface suggests or affords to use the chair as a sitting (or standing) device. "Perceptible affordances are inter-referential: the attributes of the object relevant for action are available for perception. What is perceived is what is acted upon" (Gaver, 1991, p. 81). It means perceptible affordances are sort of the most obvious usage of an object to fulfil a need resulting directly from perceptible information available and maybe past experiences with it—just like it was explained with the different door handles above.

A *false affordance* of a chair would be to use it as a means to paint a wall. Even though one could turn the chair upside down and stick its legs into paint and apply it on the wall, one would probably conclude that a chair doesn't really afford being used as a painting brush when the need was to paint a wall regularly, efficiently and without dripping too much paint on the floor. Therefore, Gaver (1991, p. 80) concludes "if information suggests a non-existent affordance, a false affordance exists upon which people may mistakenly try to act". Another example of what a false affordance could look like can be found in Nye & Silverman (2012): If the chair from above would not even be a real chair but only a well painted three-dimensional chair on a wall, at first one would be drawn to the chair trying to interact with it, however, shortly after realise, that the chair indeed does not afford sitting or standing on it. In both examples, acting upon false affordances does not seem to result in satisfying one's actual need which makes the difference between false and hidden affordances.

Gaver (1991, p. 80) states, "if there is no information available for an existing affordance, it is *hidden* and must be inferred from other evidence". To stick to the same scenario where a chair is used as a means to paint a wall, however, a different need or goal would make it clear that the affordances of the chair no longer would be neither perceptible nor false but *hidden*: If the need was to experiment with different patterns on a wall or use creative means to paint instead of a paint brush, interacting with the chair in that way would serve the need and therefore, in fact, still not be considered as a perceptible but rather a hidden affordance. These examples show that the very same object, in this case a chair, can have different affor-

dances which on one hand are only revealed through the interaction with it and on the other hand correspond with or match the individual's need.

Perceptible and False Affordances of Resources

These examples so far have been reduced to affordances of objects, just as Gaver (1991) referred to in his work. However, Gibson (1979, p. 127) who came up with affordances theory already insinuated a broader range of appliance since he wrote about "affordances of the environment"–not solely of objects. It is the very combination of Gibson's (1979) and Gaver's (1991) research on affordances theory that brought about the idea of transferring it to resilience research, especially research on resource navigation. The idea of affordances can be expanded to anything within the environment: Through the interaction with *things* in the environment (people, situations, institutions, etc.) some things reveal affordances that can help maintain health and therefore be classified as a resource. That said, the very same *thing* can have a different range of affordances depending on the individual's need—what qualifies as a resource underlies the subjective estimation of the individual.

As explained above, affordances can be perceptible, false, or hidden (Gaver, 1991)—also within resources. *Perceptible affordances of resources* facilitating resilience are comparable to the ones I before addressed as classical or conventional and socially accepted resources. From the list of resources above, I will just repeat a few: resources within the family like a well-balanced attachment, resources within the educational system like a good relationship with teachers, the availability of low-threshold offers or supported activities from family and peers (see Steinebach, 2013, p. 63). "What is perceived is what is acted upon" (Gaver, 1991, p. 81) which is why perceptible affordances of resources within the environment are sort of the most obvious or the most socially accepted ones to fulfil a need. Perceptible affordances of resources therefore are usually found in environments rich in conventional resources.

What would *false affordances of resources* look like? Transferring the idea of false affordances into resource navigation is quite tricky since the answer easily becomes morally loaded and difficult to distinguish from hidden affordances. Hence, how can we transfer Gaver's (1991, p. 80) claim, "if information suggests a non-existent affordance, a false affordance exists upon which people may mistakenly try to act" onto resource navigation? Acting upon false affordances of resources would ultimately result in a disillusionment— even if only in retrospect: One was trying to secure a (hidden) resource to maintain one's mental health, however, there are no long-term benefits to be expected from the alleged resource and their pursuit would result in bearing high costs for oneself or others. That said I want to stress a difference between false and hidden affordances: For, not everything that allows an individual to satisfy a psychological need, at all costs, automatically reflects hidden affordances of a resource or hidden resilience. Otherwise, everything could become a resource as soon as an individual considers it to be one, no matter how destructive the outcome. This would be quite a difficult position to defend, also in terms of legal issues and, ultimately, the concept of resilience would inevitably collapse.

I conclude, whenever an individual is acting upon false affordances of resources, their growth is hindered, however, acting upon hidden affordances of resources would foster development. False affordances of resources can then be understood as deceptions: What is expected will not be delivered, hence, further development and maintaining mental health

is hindered, resilience is unlikely to occur. The richer an environment is endowed with perceptible resources, the less likely false (and hidden) affordances of resources are navigated to. The same pattern counts for less richly equipped environments: the less perceptible resources are portrayed in the environment, the harder it becomes to navigate to these conventional resources and the more likely false or hidden affordances of resources are navigated to and acted upon.

Hidden Affordances of Resources

Hidden affordances of resources or in short *hidden resources* explain why something that is not considered a conventional resource or a resource at all can still meet an individual's need and maintain their mental health: "if there is no information available for an existing affordance, it is *hidden* and must be inferred from other evidence" (Gaver, 1991, p. 80). In a previous work (Lisi, 2020) I noted that what is seen either as a risk factor, a positive developmental outcome, or a strategy to access resources always reflects the norms that prevail in the given society. Therefore, defining absolute resources or risk-factors becomes quite confusing, they rather seem to be relative (Lisi, 2020). However, taking a closer look at norm-deviating resilience processes including the aspect of hidden affordances of resources could lead to a more differentiated understanding of individual resilience processes and increased acceptance of them.

In line with this relativity of resources and risk-factors there appears to be a relationship between the exposure to threat and the recognition of hidden affordances of a resource. To illustrate this relationship let me use a non-psychological example: If you were in a workshop because you wanted to hammer something you probably would not buy a screwdriver, but a hammer—even though a big screwdriver affords hammering with it. If you were stranded on a deserted island, only equipped with a screwdriver, and needed hammering something, you probably (or hopefully) would not wait until you find a hammer, but instead use the screwdriver to hammer. This example makes clear that the hidden affordance of the screwdriver (to use it as a hammer) has always been there: the screwdriver has not changed its shape or weight; however, the different context and level of vulnerability result in recognising other affordances than before. Transferred to resource navigation, as I stated above, it becomes clear that the less perceptible (conventional) resources are portrayed in the environment, the harder it becomes to navigate to them and the more likely it becomes that hidden, rather unconventional, affordances of resources are revealed and navigated to.

Another, psychological, example implying a relationship between the level of vulnerability and the recognition of hidden affordances can be found in the often referred to example of parentification of children. The same experience, the sort of parentification where a child takes on the role of parents and looks after siblings, affords different things to different children. In one case, let us say, a child is expected to take on responsibilities within the family, but is not exposed to adverse circumstances overall because the environment offers enough resources, it is more likely that the child would suffer psychological damage from this parentification (Hooper et al., 2008). In another case, a child who grows up under adverse circumstances—like the single mother being an alcoholic and no longer able to provide adequately for the children—will gain in standing within the family by engaging in the role of a parent. Since the just described environment provides very few resources, the engagement in family responsibilities can afford an experience of self-efficacy, which can result in

a sense of purpose (Ungar et al., 2013) and increase the well-being of the child (McMahon & Luthar, 2007). Vulnerable children who find themselves in poor environments may experience their parentification not merely as an overload but as a source of feeling important (see Hooper et al., 2008). The level of vulnerability therefore influences what affordances are recognised and what resources are navigated to in order to meet one's basic needs. Satisfying one's basics psychological needs such as the need to belong, the need of experiencing self-efficacy, the need of meaningfulness, experiencing pleasure or control (Epstein, 1993; Grawe, 2006) helps the individual to stay mentally healthy.

Yet another example of hidden affordances of resources can be found in a study conducted by Ungar et al., (2013). They also stress the fact that positive evaluation of a developmental outcome, i.e., considering someone resilient or not, depends on gender, culture, and associated expectations. In their study, Ungar et al., (2013) operationalised resilience as the temporal postponement of adolescent sexuality initiation. It means the later teens engage in sexual relations the more resilient there are considered. This again raises the question of whether such a presumed protective process is significant for all adolescents or only for young women. And what about vulnerable young women with low self-esteem?.A young woman at risk who chooses to engage early in sexual relations to increase her diminished self-worth, at least in the short term, may be using an unconventional resource navigation to meet her psychological needs (e.g., intimacy and attachment). She therefore recognises the hidden affordance of early sexual relations, which may be appropriate for her but not for others around her.

Studies conducted with traumatised children (e.g., sexual abuse, physical violence) indicate they often show externalised behaviour like being loud, aggressive, breaking rules and sometimes even self-harm or drug abuse (see Perry & Pollard, 1998). Rocking, swaying, or banging one's head against the wall are behaviours that can numb the painful experiences caused by traumatic events, as they release the body's own opiates (Ahrens-Eipper & Nelius, 2014). Another way to cope would be to actively use drugs (Ahrens-Eipper & Nelius, 2014, p. 45): "Alcohol, opiates and cocaine can serve to reduce anxiety, avert dissociation and stimulate the dopaminergic and mesolimbic brain areas to dampen traumatic memories". Ahrens-Eipper & Nelius (2014) point out furthermore that children who react to trauma with off-putting behaviour similar to attention deficit hyperactivity disorder (ADHD) run a high risk of not being recognised as suffering from trauma and therefore get therapeutic and psychiatric maltreatment. However, their behaviour still might serve as means to feel self-efficient, attached (through negative attention) and in some cases as a means to numb the pain from traumatic memories which otherwise would be overwhelming. So, in a way, they manage to stay healthy despite everything. Maybe I should stress again that vulnerability here is very high due to traumatic experiences. And especially the behaviour to numb the pain should be considered as an emergency strategy on the way to potential resilience rather than a permanent solution. So, one could argue that using those strategies permanently would rather be considered a false than a hidden resource—as a short-term or transitional solution, however, it might just help to stay mentally healthy.

It becomes clear that neither resources nor risk factors are to be considered as absolute. Rather the level of exposure can twist the thought of what is seen as beneficial or unfavourable for an individual which means one person's risk, could be another person's opportunity (see McMahon & Luthar, 2007, Ungar et al., 2013)—especially if the level of exposure is already high. I argue that the basic needs for an individual stay the same, no matter the

extent of vulnerability. However, where individuals seem to meet their needs or what affordances are being recognised, highly depends on the context and the already existing level of adversity. In other words, individuals at risk desperately seek to stay mentally healthy and hidden affordances of resources are their—sometimes messy—way to do so.

Revisiting Examples of Hidden Resilience complemented by Hidden Resources

Looking back at the two examples of hidden resilience, the child soldier Beah and the sister who was considered problematic, I want to reanalyse them under the concept of hidden affordances of resources. The memoirs of Beah (2007) are a rather extreme example to discuss hidden resources and affordances, nonetheless, a very striking one. Especially, nowadays, when considering how many people are fleeing their country because of war situations and suffer trauma as a result. As a reminder, Ungar et al. (2013, p. 4) wrote: "Beah reports his anger when the help organisation took away his gun after they took him out of the combat unit. He says, he repeatedly imagined returning to his combat unit afterwards. He says that he was proud to be part of the army, fighting the rebels who had killed his parents". No doubt that this was a situation where vulnerability was immensely high and the display of perceptible resources quite low. This situation and context lead Beah to perceive the, presumably beforehand, hidden affordances of the gun which then again functioned as a hidden resource. In Beah's (2007) case the gun afforded a feeling of control, even the feeling of self-efficacy. This is in line with Liebels (2004) research on child soldiers and other presumably exploited young people: Even potentially dangerous resources or strategies can be useful in an environment where resources are scarce and when there are few other options for maintaining mental health. In other words, as stated above, the level of vulnerability influences what affordances of resources are recognised to meet one's basic psychological needs—the need to belong, the need of experiencing self-efficacy, the need of meaningfulness or experiencing control (Epstein, 1993; Grawe, 2006). Presuming that every individual seeks to satisfy these basic needs, regardless of whether an environment is richly endowed in resources, it seems obvious that wherever individuals recognise affordances that would meet their needs they stick to it—even if it is a dangerous object. Unless another real and valid substitution for that, in this case, dangerous resource is provided, the individual will stick to the one found and will not navigate to another. Looking at the gun and Beah's (2007) reaction towards taking it away from him through the lenses of hidden affordances it is no longer surprising that he felt "anger when the help organisation took away his gun after they took him out of the combat unit" (Ungar et al., 2013, p. 4) since it deprived him of feeling in control and self-efficient.

In the context of hidden resilience, I referred to a second example of a sister and a brother who were taken from their drug-addicted mother (Ungar, 2005) and where the brother was considered more resilient than the sister. The sister, unlike her brother, showed a lot of angry behaviour that "secured for herself a sense of commitment to her family of origin and marked her resistance to what she perceives as the wrongful removal of her and her brother from her mother's home" as Ungar (2005, p. 436) noted. In line with the conceptualisation of hidden (affordances of) resources, Ungar (2005, p. 437) claims that individuals "do what they do to survive, their chaotic behaviour an accommodation to the threats they perceive from others. They navigate to whatever success they can achieve by engaging with or resisting services as part of an elaborate dance to have their needs met". Ungar's (2005)

observation and classification of the sister's behaviour as signs of hidden resilience work in favour with the navigation to and recognition of hidden affordances of resources that meet her needs. The need to belong to her family was presumably met by revolting against the authorities. Had she given in and been more agreeable and less angry it would probably have felt equal to a betrayal of her family.What is more, through her revolting she gained a lot of attention by different people, for example the school or social services what must have made her feel self-efficient, meaningful, or even in control of the situation what helped her stay mentally healthy (Epstein, 1993; Grawe, 2006). Complementing hidden resilience by hidden resources shows the complex nature of resource navigation and resilience processes per se, since looking at it this way allows for a more open-minded view of resilience than the usually truncated interpretation of successful adaptation.

Discussion

Recognising hidden affordances of resources are the missing piece to explain the concept of (hidden) resilience. These approaches are in line with a social ecological perspective of resilience where the environment is considered more important than individual qualities to explain resilience (Ungar et al., 2013). What is more, many resilience researchers conclude that resilience depends upon an interaction of the resources found in the environment and the vulnerable individual (Armstrong et al., 2005; Barter, 2005; Ungar et al., 2013). Or as Ungar (2005, p. 429) puts it: "Children's resilience is as dependent on what is built inside them as what is built around them." Moreover, the concept of hidden affordances is both compatible with the pre-existing concept of hidden resilience (Ungar, 2002) and the here suggested concept of hidden resources: Hidden affordances explain unconventional or hidden resource navigation because they indicate the functional range of a single resource. Consequently, *hidden resilience can be understood as the result of successful hidden resource navigation through recognising hidden affordances.*

To sum it up, *hidden resilience* focuses on socially unaccepted outcomes of vulnerable individuals and emphasises a developmental pathway maybe taking years sometimes (Ungar, 2002). *Hidden resources* can be seen as the nonconventional behavioural patterns used on this path facilitating resilience through the recognition of *hidden affordances* that "must be inferred from other evidence" (Gaver, 1991, p. 80) to meet one's psychological needs. In these three definitions *hidden* can mean unusual, unexpected, unconventional, or even inappropriate—therefore somehow *messy* –, however, beneficial for the individual. Problematic behaviour in vulnerable youth such as aggression or gang affiliations could be a strategic way to navigate to health resources and a way to experience control and acceptance (Ungar, 2004).

Since resilience is primarily the quality of the environment and only secondarily the quality of the individual (Ungar et al., 2013) it seems evident why a safe neighbourhood, good schools and secure ties to caregivers explain more differences in children's developmental paths than individual characteristics of the children do (Sroufe et al., 2010). Even though it is easier for individuals to navigate to resources that are perceptible and vastly spread out in the environment it does not hinder them to meet their needs through hidden often unconventional resources to stay healthy. All environments are endowed with various resources that can promote resilience, both perceptible and hidden, as well as more and less

socially accepted. Through the individual's interaction with the environment affordances that maintain health reveal themselves, hence hidden resources are navigated to. However, not everything that allows an individual to satisfy a psychological need at any cost automatically reflects hidden affordances, resources, or resilience. Whenever resource navigation either promotes behaviour that hurts others or leads to enduring self-harm, the terms hidden resilience, or hidden (affordances of) resources are inappropriate and misleading.

Further Thoughts about (Hidden) Resilience Processes

Above, I have sketched some thoughts about false affordances of resources which I would like to extend here. The question that rose to me was, how I could conceptualise hidden affordances of resources without undermining the concept of resilience as such. For if it is solely up to individuals to decide whether something is a resource or not, as long as it meets their psychological needs, we inevitably run into a few problems: The concept of resilience concentrates against the background of a negative expectation, i.e., without a difference to a prognostic negative outcome, the concept dissolves as such. And if all developmental paths can be interpreted as *some kind of resilience*, resilience in the proper sense no longer exists. It would eventually mean for example that a violent person abusing other individuals in order to feel self-efficient or in control could be seen as resilient as well as the heroin-addict who feels pleasure, at least for a short time, by injecting the drug. I cannot stress enough that these sort of cases, and similar ones, should not be understood as examples of hidden resilience through successful navigation of hidden affordances of resources. Even though, one could call this sort of resource navigation *unconventional* and *socially unaccepted*, which are also characteristic for hidden affordances of resources, there is a thin line which suggests not to advertise it as resilient behaviour. One criterion could be that hidden resources are of a transactional nature and rather promote than hinder development. Maybe even preparing the way to move onto less self-harming behaviour and secure safer and more conventional resources. That said, acting upon hidden affordances of resources promotes further development and increases individual's well-being albeit in an unexpected, unconventional, or even off-putting messy way. Therefore, I stand by the statement, that not everything that allows an individual to satisfy a psychological need, at all costs, automatically reflects hidden affordances of a resource or hidden resilience, it could be a false affordance.

While from a conceptual point of view a differentiation between hidden and false affordances is necessary, I can see that from a therapeutic perspective it can be fruitful not to be judged upon this differentiation. In that context it can be quite beneficial for individuals when their acting upon false affordances of resources is interpreted as an attempt to satisfy basic psychological needs. Still, not only from a conceptual point of view, however, from a societal—eventually also therapeutic—perspective it seems important to distinguish between successful and less successful resource navigations. An index to do so could be that very criterion of self-harm or harming others. Nonetheless, this criterion results in a further complication: resilience processes are rarely linear or ideal, in the sense that only the *pure self-beneficial* resource is navigated to and harmful resources are avoided—resilience processes as pointed out earlier can be messy. Especially when we look at traumatised children, self-harming behaviour like banging their head against the wall is a way of coping with stress and anxiety as body's own opiates are released. This certainly does not seem like a merely beneficial resource—you would also never recommend such a strategy—nevertheless, we

should not condemn that behaviour but seek to support the person, so they have the chance to navigated towards other resources resulting in less self-harming behaviour.

That resilience processes are indeed messy and not only the pure self-beneficial resources are navigated to can also be found in the study of Kassis et al., (2018). They found that within young adults who experienced family violence the absence of negative outcome in one area (e.g., the absence of depression) does not necessarily mean that there is no negative outcome at all. Looking at them more closely, the young people report, among other things, an increased use of substances and less protective factors such as self-acceptance or an optimistic orientation towards the future (Kassis et al., 2018). The research team concludes that engaging in resilience processes imposes costs on the individual, for example substance abuse. The picture that one might have of resilient individuals—they emerged unscathed from stressful situations—therefore needs to be adjusted.

Richly Endow Surroundings with Resources and Resilience Becomes Likely

Taking everything into consideration, one might ask what determines if a vulnerable child stays vulnerable or becomes resilient? "It is the process by which high-risk individuals gather the resources needed to sustain an image of themselves as healthy that creates resilience. The randomness of these resources and the process by which they are exploited, including the resources of discursive power, will determine whether a child is resilient or vulnerable" (Ungar, 2004, p. 79). In other words, whenever vulnerable individuals can recognise affordances of resources, whether hidden or perceptible, that meet their needs and keep them healthy, resilience is very likely. For that reason, in the best of all cases environments—countries, regions, cities, villages, quarters, schools, families etc.—should be richly endowed in (perceptible) resources for individuals to autonomously navigate to them according to their needs. Since we are not living in the ideal world some individuals do not find themselves in resourceful environments, they have to work harder, sometimes even desperately so, to stay healthy. Social workers, therapists, teachers, and other people who work with children and youth help these individuals by not stigmatising them as failed, hopeless, or worthless members of our society, however, providing them with resources (e.g., attachment or feeling meaningful).

Resilience processes, as seen, can be or usually are messy in the sense that they are not linear and involve socially unaccepted resource navigation. Important seems that throughout the mess, a strong development towards healthy resources is perceivable and harmful behaviour becomes the exception. What is more, by looking at resilience as a rather long adaptive and winding process, the term increasingly differentiates itself from its media-hyped overcall: Resilience is not something that can be trained like a muscle, nor is it the individual's solution for socially caused problems. An ideologically distorted interpretation of resilience research in this sense could be that the responsibility for motivating and committing to one's own development under adverse circumstances lies solely with the individual (Ungar et al., 2013). Nevertheless, resilience is neither a phenomenon of nor for the economy. In my opinion, we get closest to the phenomenon of resilience when we look at it open-mindedly and differentiated with a therapeutic hint. The research performed on resilience by certain scientists (Kassis et al., 2018; Lisi, 2020; Sroufe et al., 2010; Ungar, 2002, 2004, 2005; Ungar et al., 2013) does so and helps to better understand resilience processes and resource navigation: When becoming resilient it is not unlikely that navigation

away from harmful resources or environments towards beneficial ones will also lead in a roundabout way through "less-but-still-harming" resources.

By acknowledging a certain amount of mess, we sharpen the view towards hidden resilience and hidden (affordances of) resources which allows us to take off our conventionally tinted resilience-glasses and recognize various resilient ways of life. Maybe next time you become annoyed by the child who often comes late to school, hardly ever brings their belongings with, or often disturbs your lesson, try to see it as a desperate attempt to stay healthy—you might be the hidden resource for that child that affords feeling meaningful and attached at least while being at school. And maybe, if you offer a real relationship, not consisting of negative attention, however, showing interest in the child as a person, it might just happen that the off-putting behaviour no longer affords pursuing and resilience is likely to occur.

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