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Neuro-cognitive factors in adolescent psychotherapy

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Neuro-Cognitive Factors in Adolescent Psychotherapy

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Abstract

Cognitive and developmental differences between teenagers and adults must be overcome to ensure a level playing field in the process of counseling. Exploring the developmental factors involved, and discussing associated treatment interventions can help the counselor close this gap by improving client adherence to treatment and outcomes. This paper consists of a review of the current literature in neuropsychology, neuroscience, cognitive linguistics and counseling, as it relates to brain and cognitive developments in adolescence. These findings are referenced to show the many developmental changes that occur in adolescence, and how those changes can be a hindrance to successful participation in traditional psychotherapy. Because those changes determine client's behaviors as well as dimensions of mental functioning, it would be important for counselors and other mental health practitioners to consider alternative and non-traditional models of treatment. For this reason, this paper concludes with a section on clinical applications and treatment strategies that take into account the factors mentioned above, and offer approaches that seem more appropriate when working with adolescent clients.

Introduction

Professional counseling and psychotherapy are generally provided by individuals who have completed advanced training and obtained a graduate degree. This means that this type of counseling is more likely to be practiced by individuals typically in their young adulthood and beyond. In fact, many of the traditional counseling theories and approaches were developed for motivated adults (Lambie & Sias, 2006). Having that in mind, I became interested in the process of counseling adolescents, the presenting challenges that the counselor may be encountering in this process, and how they can be addressed. What made this question even more important is the fact that the peak onset of many psychiatric disorders occurs during adolescence (Paus, Keshavan & Giedd, 2008). What I propose is that a counselor's ability to better conceptualize and connect with the teenage client therapeutically is contingent upon his or her understanding of the many "blind spots" that may cause interference during this critical encounter.

As adults, our brain functions and intellectual abilities differ from those of adolescents. As such, by virtue of their developmental stages, we can infer that an adult counselor and a teenage client working in counseling will likely perceive their process and filter their experiences differently.

Put simply, the two minds seeking to engage in a collaborative working alliance have different modes of intellectual functioning as well as potential. This can mainly be attributed to the fact that the teenage brain is still in the process of undergoing important transitions and maturation.

My goal is to conduct a review of the literature and discuss cultural and developmental events that occur in adolescence. I will begin by examining functional and

organic brain factors that mental health service providers should keep in mind when considering the broader biological context within which concerns may emerge. In doing so, mental health counselors will stand a better chance at establishing good rapport with teenage clients. I will also discuss the connection between brain development and the processes of counseling. This will require a discussion on cognitive processes and linguistic abilities in adolescence. Based on this review, I will propose strategies that can help promote better congruence between counselor and client, strengthen the therapeutic alliance, and improve client's adherence and participation in therapy.

Neuro-Cognitive Factors in Adolescent Psychotherapy

Brain and Hormonal Developments in Adolescence

Adolescent brain development is the most critical period in our life span (Paus, Keshavan & Giedd, 2008; Kolb & Whishaw, 2016). Because the definition of adolescence varies across cultures and subcultures, adolescence can hardly be defined in terms of age and numbers. A more encompassing definition was offered by Arain, Haque, Johal, Mathur, Nel, Rais, Sandhu and Sharma (2013): “Adolescence is the developmental epoch during which children become adults – intellectually, physically, hormonally and socially” (p. 449).

Though there are many morphological and psychological changes that take place in adolescence, the focus of this paper will be limited to a few psychological aspects of adolescent development that are relevant to the purpose of this project. This means, because of our emphasis on pathology and mental health, our discussion on the developmental milestones of adolescence will likely sound problem-focused. We hope, however, that instead of a problem-focused paper, seeming challenges will be seen as

opportunities. Since adolescence can represent a time of vulnerabilities from a mental and emotional point of view, this section will examine key developments in adolescence that could provide useful knowledge and tips for counselors and other mental health practitioners working with adolescents.

Adolescence is a developmental stage where teenagers experience a series of physiological and hormonal changes. According to Jasarevic, Morrison and Bale (2016), the influx of hormones during this stage of development influences mental health. Furthermore, Baca-Garcia et al. (2010) found even more interesting findings. According to their study, during the menstrual cycle, levels of gonadal hormones fluctuate, and early evidence has suggested that such fluctuations may affect susceptibility to addiction, relapse, post-trauma pathology, and suicidality. This influx of sex hormones, coupled with rapid brain development increases the risk of psychopathology during adolescence (Field, Jones, & Russell-Chapin, 2017). In the next few paragraphs, we will discuss brain maturation from two principal perspectives: structural developments and functional developments.

The whole structure of the human central nervous system (the brain and the spinal cord) can be observed as early as the embryonic stage. This development follows a sequence where the more primitive regions are formed first. After the spinal cord, the rhombencephalon (hindbrain) is followed by the mesencephalon (midbrain) and lastly the prosencephalon (forebrain) (Kolb & Whishaw, 2015). One of the commonly discussed milestones in adolescence is the development of the frontal lobe and the role it plays in regulating impulses, novelty-seeking behaviors, and decision making. What is important to remember in regards to the frontal lobe development is that although the adolescent

brain is fully formed, myelination (the insulating structure in the outer layer of the neuron that speeds up the travel of the electrical current between neurons) follows the same sequence. In other words, brain myelination or insulation begins with the primary brain regions that are necessary for survival, and continues by insulating secondary and tertiary brain regions up until adulthood. Because adult functions are attained only after this process is complete, myelination can be used as a rough index of cerebral maturation. One reason why this is significant for counseling is that it can serve as a good reminder to counselors that adolescent clients are at an earlier stage of development, and their brain is in the process of becoming more and more sophisticated. Because one of the key functions of the prefrontal cortex is to regulate impulse control, decision making and top-down processing, teenagers are at greater risk for impulsive behavior until that brain region is fully developed (Field, Jones & Russell-Chapin, 2017). As teenagers continue to mature, they begin to develop social cognition and the theory of mind (Blakemore & Mills, 2014). This is governed by a set of brain structures, including prefrontal cortices regions such as the medial prefrontal cortex, the anterior cingulate cortex, the inferior frontal gyrus, the temporo-parietal junction, the amygdala and the anterior insula (Field, Jones & Russell-Chapin, 2017). The hippocampus, which plays an important role in memory systems, does not fully develop until adolescence and early adulthood. Having this in mind can help foster understanding, as many teenage clients may express a sincere desire to take a certain course of action, yet are unable to consider their own vulnerabilities. Such limitations occur independently of the teenage client's will and desire to change.

In addition to the structural changes discussed, the teenage brain develops modularity (Kolb & Whishaw, 2016). Mental support skills or subroutines help mobilize and apply mental intellect. To illustrate this idea, let us consider memory retrieval. In this task, the information we need recalled requires support skills to access and mobilize the information in our memory; it also requires maintenance or the holding of that information (working memory). An even better, more elaborate analogy from an April 19th, 2017 presentation at James Madison University, proposed by psychologist Dr. Peter Patrick of the University of Virginia, is "IQ is the engine in your car, your working memory is the timing belt; fluency is the transmission. Those are subroutines around your intellect." We can infer that a strong IQ score or the ability to be congruent with an expressed commitment relies on the participation of various support systems. Brain development implies the development of various support systems. A mental support system (subroutine) can affect the overall result in the case of a performance test, or observable behavior. It is important to keep in mind that these support systems and subroutine are undergoing their own maturation process.

In addition to mental health vulnerabilities, other emerging developmental changes may, to a certain degree, be in conflict with regular societal expectation, such as academic involvement and participation. As a result, they may affect teenagers' ability to perform at their optimal capacity in some areas of functioning. In adolescence for example, teenagers experience a delayed secretion of the neurotransmitter melatonin, resulting in a 2-hour sleep-wake phase delay relative to sleep-wake cycles in middle childhood. Owens, Belon and Moss (2010) recruited 3000 high school students to examine the effects of a delayed school start time, compared to their previous starting

time. After the start time delay, mean school night sleep duration increased by 45 minutes, and average bedtime advanced by 18 minutes. According to their findings, students reported "significantly more satisfaction with sleep and experienced improved motivation. Daytime sleepiness, fatigue, and depressed mood were all reduced. Most health-related variables, including Health Center visits for fatigue-related complaints, and class attendance also improved." (p. 7). Other relevant information from this research shows that 80% of American teenagers are getting less than the recommended 9 hours of sleep on school nights, and that the average teenager is chronically sleepy and pathologically sleep deprived. According to a meta-analysis by Hale and Guan (2015), out of the 67 studies they reviewed on the relationship between screen exposure and sleep outcomes in adolescents, they found that screen time adversely impacted sleep duration in 90% of the studies. These findings may be of interest to counselors and practitioners who seek to explore the ways in which electronic devices and technology in general could impact their client's overall functioning. A discussion on brain developments in adolescence requires that we not only explore how these events are observed, but also how they are experienced in counseling. The next section offers a good parallel that not only supports the ideas previously presented, but also integrates our knowledge on teenage brain developments with how they are experienced cognitively through interpersonal communication.

Cognitive and Linguistic Developments

For counselors working with adolescents, it is important to keep at the back of our minds that teenage clients may be experiencing counseling differently than adult clients. Psycholinguistics research on the cognitive processes of inference and causal reasoning

offers an interesting insight. The construction of abstract, non-narrative texts in schoolchildren and adolescents reveals that being able to write an essay or give a talk discussing abstract general problems such as “violence in schools” or “conflicts between people” is a more demanding task than constructing a story about these topics (Berman, 2007).

Adolescents develop sophisticated metacognitive abilities to understand abstract concepts as they mature (Berman, 2007; Riley, 2001). This is meaningful in terms of understanding the practicalities of brain development. We can see that the insulation of the brain’s tertiary regions does not solely speed up electrical current in the brain or regulate impulse control, but appears to also confer the ability for abstract thinking, which is essential for therapy. Successful talk therapies involve more than merely listening to narrated events. Presbury, Echterling, and McKee (2008) proposed that the counselor is to listen carefully to the client’s narrative and look for the metaphors clients use to describe both their pain and their longing to find relief. Furthermore, more general socio-cognitive abilities that emerge in middle adulthood begin to consolidate across adolescence (Flavell, Miller, & Miller, 1993). Those skills include the ability to shift from an “absolutist” to a “multiplist” level of thinking. In other words, the adolescent is in the process of learning complex inferences, from alternative or literal perspectives to abstractions (Inhelder & Piaget, 1958).

Art can be an easy medium through which teenagers and adolescents can express emotions and feelings that may be too painful or too complex to express verbally. Symbolism facilitates metaphorical language and personalized communication as it concentrates meaning into a tangible form (Riley, 2001).

Another important factor necessary for the comprehending and producing of figurative language, as well as taking inferences is the concept of metalinguistic awareness, defined as being able to think about language as an object from without (Gombert, 1992; Olson, 1996a). As noted by Levorato and Cacciari (2002), adolescents need to have developed metalinguistic awareness to use figurative language, which is acquired later in adolescence, after the linguistic ability to comprehend and produce figurative expressions. Furthermore, between the ages of 7 and 17, considerable advances take place, notably in the shift from implicit knowledge to more reflective processes and on explicit formulation of knowledge (Berman, 2007); a process coined as "representational redescription" by Karmiloff-Smith (1992). These limitations can be exacerbated by mental illness and socio-economic status.

Teenage developmental milestones are not uniform. In poorer communities with single-parent households, the assumption of adult responsibilities happens early, and is more abrupt and dramatic (Dashiff, Dimicco, Myers, & Sheppard, 2009). Poverty and socio-economic circumstances are factors that also play a role in adolescent brain and cognitive development. Children and adolescents from economically disadvantaged backgrounds have been shown to be at greater risk for teen suicide, depression, and troubled parent-child relationships, leading to poor discipline, lower school grades, and impaired social relationships (Dashiff et al., 2009).

Counselors should be aware, especially when working with teenage clients from disadvantaged backgrounds, that tasks and homework that may appear developmentally appropriate can be particularly challenging to such clients due to the different mental processing abilities. Clients themselves may not always be aware of the psychological

vulnerabilities that are compromised by their environmental challenges. Ensuring that the clients feel supported and understood may be positive experiences at they have not had in the larger societal or family environment. According to Riley (2001), teenagers feel that they "lucked out" by having a therapist who is not interested in verbal cross-examination but is rather interested in their own opinions of their world as expressed through art.

Challenges in Forming a Therapeutic Alliance

Cultural Factors and Stereotypes

When people come to counseling, they bring with them their unique worldviews and perspectives. The process of establishing a strong alliance with clients requires that the therapeutic milieu be welcoming, safe, and conducive to therapy. If the client is hesitant or uncooperative, therapeutic interventions may not be as effective.

As stated earlier, the discussion in this paper centers on the differences that exist between adult and adolescent brain. This will help us identify and disseminate more appropriate approaches counselors can use when working with adolescent clients. In order to have a more comprehensive discussion, it will be helpful to explore different perspectives relevant to the question. In theory, the case can be made that both generational groups often operate from two frameworks that seldom encounter one another. The question then becomes how to find the tools to facilitate communication between two systems that are estranged from each other.

From the MTV Video Music Award for Best Video of the Year "Parents Just Don't Understand," to stereotypical descriptions of adolescents, such as being moody, narcissistic, resistant, and having social and interpersonal problems (Lambie, 2004), many belief systems continue to sustain this divide. As expressed through those

stereotypes, adolescents are generally seen as more impulsive, while adults on the other hand are seen as more self-controlled and meticulous. This distinction is important, as it will help us understand which thinking processes may be operative.

Most adults hold beliefs or sets of beliefs about adolescents and adolescence. Those beliefs may not always reflect the true subjective, phenomenological experience of teenagers in general. According to Nucci (2005), the prevailing view among adults is that adolescence is a normative period of storm and stress, entailing a rebellion against adult standards and a decline in moral values. She discussed popular culture opinions and how it is often expressed through parenting advice books with titles such as “Surviving Your Adolescent: How to Let Go of Your 13 -18 Year Old” or “Teenagers: A Bewildered Parent’s Guide.” These stigmatizing opinions about adolescents were echoed in a 1999 study, where 71% of adults and 74% of parents surveyed described teenagers in negative terms, such as lazy, disrespectful or wild (Duffet, Johnson & Farkas, 1999). Such stereotypes in part have contributed to my interest in researching the reason why these two groups "miss" each other so often. One reason that may account for this is the failure of parents to “update” their inflexible stories and expectations of the growing teenager. Doing so can be difficult, but could help break us from our internal rigidified beliefs and narratives. As pointed out by Presbury, Echterling, and McKee (2008), rigidified stories are the result of adopting beliefs about how things are supposed to be and failing to take into account that life rarely fits well into ideal categories.

The adult brain and teenage brain are different in many respects; therefore, perspective taking becomes an indispensable asset when engaging in this type of relationship. According to Nucci (2005), adults’ perception of teenagers becoming more

rebellious and more delinquent is an overstatement. Fuentes (1998) reported data from the National Center for Juvenile Justice. She noted that there have been fluctuations over the past 30 years previous to her study of the data, but those changes were not significant. Despite evidence that teenagers today are no more defiant and resisting adult authority than those of previous generations, this remains a socially constructed misconception (Nucci, 2016).

These misconceptions are not exclusive to adults. Adolescents also seem to have their own negative perceptions of counselors and mental health providers. During my time working at a psychiatric hospital for children and adolescents, clients used to see counselors and members of the treatment team as being part of "the system." Adolescents tend to mistrust counselors and manifest those feelings "crudely, intensely and provocatively, and for prolonged periods" (Lambie & Sias, 2006). Mental health professionals are seen as part of a larger repressive structure: "the system." This initial feeling of mistrust could account for one of the many barriers that exist when it comes to successful treatment of adolescents in therapy. It could be beneficial and therapeutic for counselors to talk to their clients about such beliefs and associated stereotypes in order to speak openly about those concerns.

Psychological Factors

The circumstances that led clients to enter counseling should be considered when building a therapeutic alliance with them. Patients being court ordered to enter counseling may be apprehensive or reluctant to fully engage in therapy; this can potentially complicate the rapport building process. Most teenagers enter therapy not by their own volition, but against their will, often as a result of a concern from a parent, guardian, or

other adult (Lambie & Sias, 2006); this stands in contrast with other counseling relationships. In fact, most counseling and therapy models were constructed for working with clients who are ready to take action towards change (Prochaska, DiClemente, & Norcross, 1992). For that reason, it can be particularly difficult for counselors to establish a trusting relationship with their adolescent clients who may resent being in counseling against their own will. The counselor or therapist will have to invest some time acknowledging those barriers, power differentials, willingness to participate, and the circumstances that led them to come to therapy. Because this initial phase is critical in terms of laying the groundwork for therapy, attending to these considerations can have a significant impact on the rest of the therapeutic relationship.

In addition to teenagers engaging in therapy on those terms, the counselors are faced with the challenge of keeping teenage clients engaged once they have entered a trusting relationship with them. This can be difficult to accommodate, as many of the traditional counseling theories and approaches were developed for motivated adults (Lambie & Sias, 2006).

Teenagers generally hardly recognize and own their vulnerabilities; for many, entering therapy can be stigmatizing. Because they are sensitive about their image, especially with their peers, teenagers will put themselves at emotional risk rather than acknowledging that they need help from a “shrink.” Teenagers view “talking” psychotherapies as treatment for serious mental illnesses; however, they respond more positively to art therapies (Riley, 2001).

Many of my lived experiences while working at a psychiatric hospital for adolescents are congruent with these findings. One example is that of an adolescent

female patient on the ward who struggled with chronic suicidality and serious self-harming behaviors. Although this patient was outgoing and could hold intelligible conversations; she appeared to have internalized many painful experiences that she rarely talked about. It appeared however that she could communicate better through art. Much of her work reflected themes of death, bondage and self-mutilation.

In his book *Thinking Fast and Slow*, Nobel Laureate Daniel Kahneman identified two modes of thought: System 1 (fast, instinctive and emotional) and System 2 (slower, deliberate, and more logical). What we can infer in light of our discussion is that teenagers tend to operate from an instinctive and emotional framework (Type 1), and adults generally operate from a more logical, reflective and deliberate framework (Type 2) and those two systems involve two separate brain processes. According to a pivotal study by Anthony Jack (2014), we have built-in neural constraint on our ability to be both emotional and analytic at the same time. A good demonstration of neural inhibition between these two neural networks is perceptual rivalry, where two different objects are depicted in a single image – for example, an ambiguous image that shows a duck facing one direction and a rabbit facing the other. The two cannot be seen simultaneously. Jack used this representation to demonstrate neural inhibition between the entire brain network in charge of social, moral, and emotional engagement with others, and the one in charge of scientific, mathematical and logical reasoning. We should keep in mind that these differences are more likely to occur in emotional situations and cannot be generalized to all circumstances. Adolescents appear to demonstrate capacity for self-control and impulse control in non-emotional situations similar to that of adults (Casey & Caudle, 2013).

Since therapy is likely to evoke emotions in both client and therapist, counselors should be prepared for the challenges associated with working with adolescents in counseling. Unfortunately, many adults respond to adolescents' resistance with aggressive confrontation, resulting in a power struggle (Lambie, 2004). According to Miller and Rollnick (2002), a confrontational style of counseling tends to produce resistance in adolescents

The Working Alliance

"It is the quality of the interpersonal encounter with the client which is the most significant element in determining effectiveness."

Carl Rogers –

In this section, I discuss some important aspects of the processes involved in the counseling session. To complete our conversation about the cognitive processes relevant to the relationship between counselor and teenager counselee, this part seeks to examine successful counseling and therapy process. This will be important, in terms of creating a milieu or environment where other interventions will be held and utilized.

Consider the relationship between a hard drive and software. The software is a set of programs housed in a drive, creating the environment where the programs can operate. Similarly, the therapeutic alliance is foundational. It creates the environment within which we can begin to apply developmental psychology to successful practice. In other words, the counseling alliance provides the context and the appropriate setting where the therapist can best utilize applicable findings from neuroscience and cognitive science. As such, the neuropsychology of counseling and therapy can only exist and find its application within a therapeutic relationship.

As we will see in this section, the therapeutic process in itself relies on rapid neural activity that often takes place outside of conscious awareness. Those processes have an impact on the emotional transactions in interpersonal psychotherapy. Tamietto (2009) found that emotional contagion does not require the visual perception of emotions. In a study conducted on patients blinded as a result of brain damage, the patients were still able to accurately perceive the emotions from other subjects, bypassing the visual cortex (a condition known as emotional blindsight). This finding suggests that empathy involves more than simple mimicry, and can be detected beyond the observable physiological expressions. This may explain why Carl Rogers (1962) stressed the idea that the quality of the interpersonal encounter with the client is the most significant element in determining the effectiveness of counseling. One of the necessary conditions to ensure good quality of this relationship is genuineness. This philosophy was often referenced to, and applied by one of my clinical supervisors working with adolescents. He believed that being genuine and transparent was important to adolescents, especially to those in counseling, because they likely have been let down by important attachment figures in their lives.

In the early stages of the alliance, it is important for the counselor to work diligently towards establishing trust in order to secure a solid bond. This is important because of the hesitancy that is often experienced when teenagers are expected to communicate with adults (Katz, 1997). This reluctance can also be overcome by initiating a discussion on the topic, and inviting teenage clients to share their perspective. As important a role as empathy and genuineness play in creating a conducive environment, they cannot be manufactured; rather, they can be evoked through a fine attunement and

attending to the client during interpersonal exchange. During interpersonal communication, we unconsciously mirror each other's responses at a level undetectable to the naked eye (Fein, 2011). Because of our mirror neurons, we automatically mimic and synchronize with the musculature of the person we listen to; "because we unconsciously mimic their emotional movements, we inadvertently feel the emotions of those with whom we interact" (Fein, 2011, p. 341). Having that in mind, it is key to remind ourselves that developing self-awareness throughout the counseling process is chief to maintaining a strong bond with the client. Counselors can, for example, unconsciously bring into the session their own internal working models and value systems regarding what an adult-to-teenager relationship should look like; they should therefore become aware of how their own emotions and beliefs announce themselves in the therapeutic encounter. This is particularly important for counselors of diverse cultural backgrounds and origins.

Clinical Applications

As seen earlier, many of the traditional counseling theories were developed for motivated adults. Generally speaking, such therapies aim at gaining insight through the use of metaphorical and abstract thinking. In many cases, those approaches are not well suited for working with adolescent clients. This explains their preference for non-traditional models of therapy.

My proposed approach when working with adolescents does not suggest that we "fix" them so they can better fit our expectations. This approach acknowledges the emerging challenges associated with this stage in our psychological development. As such, it will be important for the therapist not to interfere too much with the major

developmental tasks that accompany that process. According to Echterling, McKee, and Presbury (2018) a crisis involves encountering a pivotal moment in one's life, a phase representing risk and possibility. In that sense, adolescence can be seen as a developmental crisis. Our role is therefore to support adolescents in their growth and making sure that they can transition with minimal risk. For that reason, counselors and other mental health practitioners may want to consider approaches that would ensure that treatment goals are reasonable and attainable. Setting reasonable goals represents the centrality of this paper, because it comes as a result of having reasonable expectations. If therapists and counselors have unrealistic expectations and are not aware of it, they will develop unrealistic goals for their clients. When this happens, their work with clients will be strenuous and ineffective. To avoid such difficulties, and work more productively with teenage clients, the following section will discuss some developmentally appropriate tools counselors can use to supports their treatment interventions.

Using Transference and Countertransference

During my time working at a psychiatric hospital for adolescents, many of the teenage patients I interacted with showed a remarkable interest in relationships, and in their counselor's personal lives. They would often ask questions about the counselors' romantic life, questions about their past behavior regarding drugs and dating, or even if the counselor would adopt them. Additionally, clients often wanted to know what counselors thought about them. For the mere fact of being an adult figure in their life, transference is likely to occur. I believe transference is an important factor to discuss, because the client's transference and our countertransference happen unconsciously. Those unconscious interactions often occur outside of our awareness and yet play a

significant role in reinforcing or extinguishing behaviors. As we will see, if left unchecked, they may create a cycle where both therapist and client are stuck.

Transference is the technical term used to describe an unconscious transferring of experiences from one interpersonal situation to another. It is concerned with revisiting past relations in existing circumstances (Jones, 2004). Countertransference refers to a consequence of transference and is complex in that it has different meanings. For example, the term is used to describe not only a direct personal reaction to transference but also the entirety of experiences in response to another person (Jones, 2004).

Teenager's need for acknowledgment and autonomy is an important part of their stage of development. Because in most cases teenagers are required to enter in therapy by an adult figure, they may feel that the therapy relationship constitutes a violation of their very need to assert themselves. As a result, they can become distrustful of the therapist (Church, 1994). In keeping with this idea, the counselor working with the adolescent client should be aware of the client's transference as well as their own countertransference; counselors should also consider having a discussion with clients about those concerns. Being aware of one's own transference or countertransference can be an invaluable asset to the therapeutic relationship in ensuring that the counselor does not reproduce patterns that the client may have anticipated. Providing clients with a different relationship will help them experience themselves differently in relationship with an adult figure, hence promoting healing.

According to a study by Church (1994) involving adolescents working with two groups of psychoanalysts, experienced and less experienced, the researchers found that less experienced analysts, in contrast to the more experienced ones, were more likely to

be more authoritative and directive. Church also described their relationship as one where 'adult directiveness' and 'Adolescent defiance' lead both the therapist and adolescent to be caught in a cycle. Church (1994) also proposed that the therapist's own countertransference, often expressed in the form of frustration towards the teenage client, may be the result of both therapist and client being drawn in this cycle. As Bouchard, Normandin, and Seguin (1995) noted, countertransference is both an instrument to further treatment and a potential obstacle to it.

Externalization and the Use of Visual Metaphors

Much of teenagers' conflicts, as they relate to their view of themselves, are rooted in the image in which important others see them, a process known as reflected self-appraisals (Pfeifer et al., 2009). Benjamin (1998) proposed a similar theory, according to which our personality develops as a result of copy processes that we have internalized during our interaction with important figure in our lives. The aforementioned study by Pfeifer and colleagues which examined neural pathways associated with self, versus other people's beliefs, supported this idea. Their research on adolescent's self-development also revealed that self-appraisals are shaped as the result of routinized exposures to others' perception about the self. In that sense, one can infer that this self-construal can shape the development of certain behaviors that become characterological in the long term.

The externalization of maladaptive internalized representations provides a useful and handy way to begin to assist the client in re-authoring a new self-narrative. This technique can be as simple as personifying a problem, and adding to it certain characteristics such as a name, a color or a personality, considering what is best fitting in

a given situation. Deconstructing narratives using other means can impose a burden on cognitive and affective resources. As we previously discussed, traditional methods place demands on memory systems, and other higher cortical functions. The process of externalization allows clients to describe themselves and the problem in relationship with each other (Legowski & Brownlee, 2001). This micro-level role-play-like dynamic allows clients to experience themselves as separate from the problem. According to Zimmerman and Dickerson (1996), when clients begin to spontaneously notice other possibilities, they begin to appreciate other self-narratives, and begin to experience themselves differently as persons.

A great benefit of this technique is that it assists therapists in the process of indirectly deconstructing faulty narratives that may have been copied through client's interactions with important others. This can be attained without having to utilize other techniques that place heavier demands on higher cognitive processes. Additionally, through externalization, the client is able to defeat the diagnostic merging of client and problem, giving the client a sense of personal agency (Presbury, Echterling & McKee, 2008). The resulting sense of personal agency will then enable client to have a more objective perspective in counseling.

An Adlerian Perspective

"The patient must be guided away from himself, towards productivity for others; he must be educated towards social interest; he must be brought to the only correct insight that he is as important to the community as anyone else; he must get to feel at home on this earth"

(Adler, 1973, p. 200).

"Clients believe actions, not words." (Teyber, 2000, p. 17). Another useful technique that can be used is inspired by the work and theoretical approach of one of the most influential psychodynamic theorists, Alfred Adler (1870-1937). Adler spoke about our constant striving for superiority and betterment. This drive, according to Adler, comes from us becoming aware of our natural limitations, evidenced for example in what he calls our *organ inferiorities*, or *birth order*. According to Adler, the adjusted, healthy individual is one who comes to terms with accepting those inferiorities. That individual then strives to contribute to the betterment of society as a whole, through the *Gemeischaftgefuhl*, or Social Interest (Prochaska & Norcross, 2014). This social interest, according to Adler, is fostered through a family atmosphere that promotes cooperation, trust, support, and understanding (Prochaska & Norcross, 2014). This emphasis on collaborative processes is what I would like to highlight in this section. As pointed out previously, studies by Pfeifer and colleagues (2009); Mead (1934), show that teenagers form an opinion of themselves based on what they are often told by important others. This suggests that teenagers who, for example, have been routinely labeled as unproductive members of society will internalize/copy those beliefs, which will influence their self-appraisal. As a result, many teenagers have stopped believing in themselves, or that they could be trusted and valued.

From my personal experience working at an adolescent psychiatric facility, I used this technique as it proved to be useful in many cases. I often opted for assigning clients a responsibility or task and by doing so, promoting their sense of belonging and participation towards a goal beyond themselves. Clients generally did not function well in an overly restrictive and controlling environment. Small gestures that indirectly

communicated to clients that they could be trusted or valued led to even greater cooperation, more importantly they promoted a sense of responsibility and increased self-esteem. As we may know, clients often re-enact their old patterns and expectations in therapy (Teyber, 2000). The rule of thumb in counseling and therapy is not to confirm or reinforce those expectations when they come alive in the session, but instead to provide a 'corrective emotional response.' Getting teenage clients to *feel* involved and valued is important in helping them *experience* new possibilities. Such an intervention, coming from an important other, in the person of the therapist, will likely have a significant impact on them. Determining the nature of the task given to the teenage client should be a function of the nature of the rapport between client and therapist, available options and clinical judgment.

The positive byproduct to this specific intervention could lead to potential long lasting commitments towards social interest on the part of the teenage client through what is known as the "Ben Franklin effect" (Jecker & Landy, 1969). The Ben Franklin effect can be explained under cognitive dissonance theory. It is best summarized in the following quote by Kurt Vonnegut (1961) "We are what we pretend to be, so we must be careful about what we pretend to be". The Ben Franklin effect will be discussed in more details in the next section.

The Ben Franklin Effect

"People are better persuaded by the reasons which they have themselves discovered that by those which have come into the mind of others."

Blaise Pascal –

The idea behind using this specific intervention is that it not only communicates to the client that the therapist trusts and values them, but it also gives the client an opportunity to pose a positive action towards others. To put this notion in perspective I will reference a concept from social psychology known as the Escalation Effect, sometimes referred to as 'entrapment'. The Escalation Effect is the condition in which commitments to a failing course of action are increased to justify investments already made (Haslam et al., 2006; Keil et al., 2007; Staw, 1997). The Ben Franklin effect relies on a similar paradigm in terms of investment towards a course of action, with the exception that this course of action follows positive ones, and promotes social interest. As mentioned earlier, this intervention has proven very useful in getting the client "jumpstarted". One important recommendation I would like to offer to counselors working with teenage clients is to ensure that when using this specific technique, the counselor assumes a natural demeanor as to not reveal the intentionality of the counselor's action. Often times, during my work with teenagers that were trusted with small responsibilities, or asked to do "favors", those clients displayed fleeting, brief reactions such as surprise or confusion. Those expressions occurred just milliseconds or seconds following the request. It is important that the counselor be aware of those micro-expressions, but not attend to them overtly. The counselor may even divert his or her gaze in order to not interfere with this important, transformative process. Overtly attending to those reactions, or making the client aware that the counselor had noticed those unconscious responses can be embarrassing to the client. Additionally, it may send the message that the counselor had second thoughts about his or her decision. In my work with those teenage clients, I found that moment of brief surprise a sensible moment that

needed to be honored, a moment when the client could intra-psychically reflect on, as he or she shapes a new reality; *experiences* a new possibility and update their view of the self.

Another note that bears mentioning is that this particular intervention be applied for useful ends; more specifically to guide clients away from maladaptive patterns of behavior, towards productivity for others and society. Utilizing this technique for the sole purpose of achieving compliance, devoid of a good purpose can make for a meaningless intervention.

Another way of promoting the client's sense of agency when working with adolescents and adult clients alike, is facilitating self-discovery. This process will have a greater significance if it unfolds organically. The more directive and prescriptive approaches do not motivate clients towards action. Even when the therapist is confident that he or she has identified a problem pattern or made a pivotal discovery in therapy, it is important to guide clients so that they can come to their own insight using their own personal data. In that way, the client owns the discovery, making it more likely to move towards action (Benjamin, 1998). A directive approach to treatment is likely not going to facilitate participation, especially not in adolescent clients. Lambie (2004) found that the more a counselor pushes to resolve a problem, the worse the situation becomes. As stated above, it is important that the counselor often examine how the power differentials influence the therapeutic alliance.

Conclusion

Adolescence in itself is a stage of life comprised of many transitions. As such, working with adolescents with mental and emotional issues is comparable to working

with a constantly moving object. This perspective could be useful to counselors who work with teenagers, and to clinical practice as a whole. The pertinence of this research project was strongly felt, not only because of my interest in psychotherapy research, but even more so, because of my realization that such research mainly investigates treatment modalities that were designed by adults, and for adults. The topic becomes even more interesting when we begin to discuss brain systems and cognitive development, as well as their impact on the counseling encounter. It was also essential to explore the contextual dimensions that exist beyond the counseling relationship, and that are key factors in determining the success or challenges of therapy. The context in this sense refers to the procedures surrounding the admission into a treatment facility or outpatient counseling as well as discharge and termination. In most cases, adolescent clients enter therapy against their own will and are generally referred by adults. This constitutes an essential differentiating aspect between adolescents and adults clients. Those differences should be considered when the counselor evaluates how clients' developmental needs, mental illness and their level of readiness or to participate in counseling could complicate treatment. Those factors must be understood in order to better address how they affect the therapeutic relationship and treatment outcomes.

Successful work with adolescents would first involve accounting for some of the key developmental tasks of the nervous system and cognition, as well as cultural parameters that come into play. As part of the cultural factors, the counselor should be aware of their own belief systems and transference. As we have seen, if counselors do not continuously monitor themselves, they can get drawn into a cycle by clients and become stuck. Such instances occur when counselors unconsciously draw from a set of skills that

they employ with their own family members, and that are largely shaped by their own biases as they relate to power, adult-child relationships and obedience to authority, defiance, parent-child relationships and other similar relationships. A good therapeutic relationship is essential in laying the groundwork for successful therapy. This is especially the case when working with adolescents, who often seem apprehensive when working with a counselors, because they generally perceive them as the interface between them and the legal system.

Secondly, when choosing treatment interventions, therapists and counselors should keep in mind that less cognitively demanding interventions are more desirable and attractive to teenagers. Interventions that aim at modifying behavior are preferable as they allow the teenage client to experience new roles and new behaviors. Such experiences open up a new world of possibilities for the teenage client who may have internalized a negative view of the self. Through guided imagery, clients are able to deconstruct and reconstruct new ways of perceiving themselves, allowing them to see themselves in relation to a problem as opposed to the diagnostic merging of person and problem.

Finally, it is important to promote a sense of belongingness and purpose in teenagers, by leading them to understand that they are as important to society as any other individual is. This message can be a healing experience, particularly to teenagers who were portrayed in a negative light over repeated encounters with important adult figures in their lives.

Moving forward, further studies may need to be conducted in the field of psychotherapy in order to develop an operationalized construct that measures power

differentials from a number of parameters; particularly those that may be less of a concern in most adult counseling relationships. Some possible parameters could be analyzed based on the differences in the following areas: autonomy vs. dependence, mobility vs. confinement, employment vs. unemployment, counselor vs. client, and mentally healthy vs. a mental health diagnosis. Other possible future orientations could explore these variables across cultures, where obedience to authority and the power of hierarchy is more valued. It appears a propos for further studies to investigate this question in collectivist cultures by looking at whether limited access to resources, overall reduced autonomy significantly influence power in the counseling relationship.

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