

**RELATIONSHIP BETWEEN PARENTAL AUTONOMY  
SUPPORT, SENSE OF COHERENCE AND GRIT AMONG  
ADOLESCENTS**



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degree of Master of Science (Clinical Psychology)**

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## **Dedication**

Alhamdulillah, Alhamdulillah, all praise is due to Allah (SWT), the Most Merciful and the Most Compassionate, for granting me the strength, patience, and guidance to complete this work. I dedicate this thesis to my father, whose love, and prayers continue to guide me. To my beloved mother, whose sacrifices, unwavering support, and endless encouragement have been the foundation of my journey, and to my friends, who have stood by me with care, motivation, and understanding this accomplishment is as much theirs as it is mine. Finally, I extend my heartfelt appreciation to my respected supervisor, Dr. Khawer Bilal Baig whose guidance, patience, and invaluable insights have been instrumental in bringing this research to completion.

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This achievement is not just a milestone but a reflection of my inner growth.

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## ABSTRACT

This study examined the relationships among perceived parental autonomy support (PAS), sense of coherence (SOC), and grit in a sample of 328 Pakistani adolescents (ages 13–18). Grounded in Self-Determination Theory and salutogenic perspectives, the research tested whether SOC mediates the association between PAS and adolescents' grit, and whether mother and father autonomy-supportive pathways differ. Participants completed validated measures of parental autonomy support, SOC, and grit; data were analyzed using reliability analysis, Pearson correlations, and PLS-SEM. Results demonstrated acceptable internal consistency for the instruments ( $\alpha = .70-.75$ ) and positive associations among the study variables: PAS correlated strongly with SOC ( $r = .60$ ) and moderately with grit ( $r = .49$ ); SOC correlated moderately with grit ( $r = .50$ ). In the structural model, PAS predicted grit directly ( $\beta = .302, p < .001$ ) and strongly predicted SOC ( $\beta = .604, p < .001$ ); SOC also predicted grit ( $\beta = .318, p < .001$ ). The indirect effect of PAS on grit via SOC was significant (indirect = .192,  $p < .001$ ), indicating partial mediation (39% of the total effect). Parent-specific analyses suggested father autonomy support exerted both direct and indirect effects on grit, while mother autonomy support influenced grit primarily through SOC. Findings underscore that autonomy-supportive parenting fosters adolescents' perseverance partly by enhancing a coherent, meaningful orientation to life.

**Keywords:** parental autonomy support, sense of coherence, grit, adolescence, mediation, Pakistan

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## List of Symbols

<b>Symbol</b>	<b>Full Form</b>
$\alpha$	Alpha Cronbach's Index
$\beta$	Standardized Coefficient
$f$	Frequency
$M$	Mean
$SD$	Standard Deviation
$\%$	Percentage
$r$	Correlation Coefficient

## List of Abbreviations

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<b>Abbreviations</b>	<b>Full Form</b>
SPSS	Statistical Package for the Social Sciences
SOC	Sense of Coherence
PAS	Parental Autonomy Support
FAS	Father Autonomy Support
MAS	Mother Autonomy Support

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## CHAPTER 1

### INTRODUCTION

Adolescence is a period of fast transformation and rising expectations. The process of developing an identity, changing peer and family responsibilities, and increased academic expectations are all faced by young people at this era. Resolving an "identity vs. role confusion" crisis is the main adolescent difficulty, according to Erikson (1968), and successful identity formation is associated with improved mental health. Adolescents nowadays also report increased stress and uncertainty, which can compromise wellbeing, due to social media, academic competitiveness, and world events. According to Bronfenbrenner's ecological model, the family is a substantial microsystem that is closely tied to development, therefore supportive parenting may be especially crucial during this trying time. Parental autonomy support improved adolescent demand fulfilment, which in turn led to an increase in grit and motivational endurance, according to Du et al. (2023). In practice, parents who support their children's autonomy create a favourable atmosphere that encourages their degree of agency and tenacity. However, in the developing teenager, authoritative parenting has been linked to enhanced positive effect, self-regulation, and interpersonal competence, all of which increase intrinsic drive.

The reasons as to why autonomy support is useful can be understood through the use of Self Determination Theory (SDT). SDT theorizes that there are fundamental psychological needs of autonomy, competence, and relatedness in adolescents and that they should be satisfied in order to boost intrinsic motivation and well-being. Positive results are observed in the improvement of adolescents with an autonomy-supportive home environment in terms of psychology. Autonomy-supportive parenting positively influences the intrinsic motivation among youths, as youths are able to experience their effectiveness in reaching their goals

through the support of their parents. In fact, other studies have demonstrated that even the perceived parental autonomy support is related to the better satisfaction of basic needs and better motivation among adolescents. In their turn, such motivational benefits result in increased persistence: in the context of feeling their autonomy as being respected, adolescents are “capable of being more motivated by their goals and able to persevere and their grit is larger”. In short, the nurturing conditions of autonomy-supportive parenting facilitate the development of self-esteem, happiness, emotion regulation in the youths that serve as the prerequisites of persistent attempts solving their problems despite hardships. Researchers will focus on two key aspects when analysing the research that will deal with the challenges of clinicians and the ability to respond to changes (Du et al., 2023).

Lam et al. (2025) demonstrated that among adolescents, positive parenting behaviours such as (promotion of autonomy) anticipated gratitude and life satisfaction, which subsequently contributed to increased grit levels. Such results suggest that positive emotions and resources that adolescents may have to drive grit can be gained when parents offer warmth and autonomy.

According to Bulow et al. (2022), parental autonomy support behaviours that include recognizing the views of the adolescents and promoting motivation through initiatives directly promote the need of autonomy. As an illustration, autonomy-supportive parents consider the ideas of their children, provide choice, and support self expression; whereas the controlling parenting leads to the loss of the volition. It is indicated that need-supportive parenting is very useful in most families based on empirical evidence. According to the results obtained by Bulow et al. (2022), daily autonomy-supportive parenting is deemed to determine positive affect in adolescents of almost every family. Therefore, SDT projects a universal positive impact of parental autonomy support on performance by adolescents. In

this context, grit and SOC can be formed by parental autonomy support. Improving adolescents' sense of agency and competence, parents can support the perceptions that life events are comprehensible, and controllable (elements of SOC).

Parental independence support denotes parenting practices that influence independent thinking, choice and initiative on the part of an adolescent. Autonomy-supporting parents attend to the ideas of their child, present meaningful choices, and give explanations on the reason behind rules while controlling undue power. This style conforms to Self-Determination Theory (Deci & Ryan, 1985) which states that meeting needs of adolescents in terms of autonomy (or competence and relatedness) would facilitate intrinsic motive and healthy growth. Evidence-based research demonstrates that adolescents when they feel that they have more autonomy support by their parents become more satisfied that their psychological needs are fulfilled and their motivation is also enhanced.

### **1.1 Parental autonomy support and Sense of coherence**

PAS reinforces SOC and the latter positively influences grit. Although the mediation of the relationship between PAS and grit is yet to be tested directly within the same age group, etymologic results indicate that SOC mediates the relationship between family harmony and adolescent well-being, which indicates the truthfulness of scrutinizing the position of SOC in the relation between PAS and grit. (Kaya, 2024)

Ma et al. (2020) identified that college students with higher parental autonomy support also felt more coherent. On their part, the full mediation of the positive impact of autonomy support on growth mindset was complete in their model. This means that the parents who are autonomy-supportive will be able to assist their children in making sense in the world, therefore establishing a sense of coherence. There is no significant difference

between older and younger adolescents to prove that there is a possibility of a similar relationship existing in young adolescents: parents who nurture their children to capture the meaning and control of life events may create a more systematic world in their children. It is a hidden feature that would make the car a priority in the market (Ma et al., 2020).

## **1.2 Sense of Coherence**

The sense of coherence (SOC) is a salutogenic concept that describes the global perception of an individual that life is manageable, interpretable and meaningful. A teenager who has a high SOC sees school and family-related events as orderly and anticipates what to expect, thinks they are resourceful to what demands them and they also believe that the challenges are worth doing. Strong SOC also relates to successful mental health, people with high SOC are at less risk of depression and stress-related illness. As an example, strong SOC anticipates more negative manifestations of hopelessness and burnout, whereas low SOC is associated with worse health. Since SOC is an appreciation of how an individual can comprehend and deal with stressors in life, coherence can be enhanced by a favorable environment including an autonomy-supportive family. That is, they may perceive the world as more comprehensible and manageable which can positively impact SOC by parents who promote fostering understanding and problem-solving (Datu, 2021).

The Salutogenic theory developed by Antonovsky has a construct called Sense of Coherence (SOC) which indicates the global orientation of an individual towards environmental stresses. Moreover, the family and culture play an important part according to the salutogenic theory. According to the model, developed by Antonovsky, that the level of family coherence as well as the arrangements in the society lead to increased sense of coherence. SOC is divided into three elements: comprehensibility of seeing the events in life as structured and predictable, manageability as the belief that one has adequate resources to

face the demands and meaningfulness: the perception of finding life challenges worth investing in. It concentrates on health enhancing factors not disease. It represents the sense of coherence (SOC) concept that can be described as a global orientation concerning the confidence that the environment one lives in can be predicted and that challenges are worth investing in (Mittelmark& Bauer, 2022). According to Antonovsky (1979), life experiences and especially access to generalized resistance resources (GRRs) - e.g. social support or cultural stability During the process, a person develops his or her SOC (Mittelmark& Bauer, 2022).To put it simply, an adolescent whose SOC is good believes that school, family and social happenings make sense, that they can cope with challenges and that their efforts are meaningful. (Omiya & Deguchi, 2025).

GRRs can be represented through the parental attitudes, family communication, and cultural values which can strengthen the feeling of meaning and order in an adolescent. Instead, coherence could be jeopardized by chaotic or highly regulating settings. Indeed, research has shown that parental SOC and family functioning was associated with children adjustment and SOC. Therefore, according to the salutogenic emphasis, the family system (and inclusion of autonomy support in it) is a part of a more extensive picture, which influences a SOC of a youth. According to research among adults and their relatives, it is possible to gather evidence that suggests a linkage between the current problem and the fact that, previously, adults did not find a solution to the problem of how to be useful to others (Braun-Lewensohn et al., 2016).

High level of SOC is a protective orientation, where coherent individuals view stressors in understandable, manageable and meaningful ways, allowing successful coping and direction. This is particularly applicable during the adolescence period as young people are exposed to new challenges. As an illustration, the adolescents whose SOC was high were

proved to cope with school transitions and social problems better. It has been indicated in research studies that, as individuals come to age, they tend to grow within the SOC as their thinking capacities and emotions develop, though the findings have been inconsistent. According to Braun-Lewensohn and Sagy (2016), even in the case of acute stress, SOC can become a protective factor as it is in adults. Conceptually, SOC could mediate the interpretation of parental autonomy support to the adolescents; they believed that parenting with support could make their world more predictable and manageable, thus improving coherence.

Sense of coherence (SOC) proves to be a very strong predictor of mental and physical health throughout the lifespan. As an illustration, highly SOC people are repeatedly less exposed to depression, exercise exhaustion, and senselessness. Adults with a low SOC have been associated with an increase in mortality and worse health status. Most of the work has been done on adults but adolescence is a transitional period in building coherence. Antonovsky pointed out that in its turn, the SOC of adolescents is still under development in many cases and infinitely variable (“highly vulnerable and varies widely”). Backing this up, a recent study under COVID-19 conditions discovered the following: in case of significant adverse changes (e.g., school closures, social distancing), SOC and mental well-being of youths might be decreased. That is, stress can weaken the sense of coherence of young people but it can also be reinforced by positive contexts. An adolescent with a higher SOC is therefore believed to be buffered against the stress and adjust healthily. Along with this, along with the rising prevalence of obesity, there are also increased cases of physical and psychological ailments in people (Omiya & Deguchi, 2025).

### **1.3 GRIT**

As "perseverance and passion for long-term goals" (Duckworth et al., 2007), grit is a non-cognitive quality that allows people to maintain their interest and effort in the face of obstacles, setbacks, or plateaus in their progress. This concept, which moved the emphasis from simply cognitive skills to character-based factors that determine success, came from positive psychology to explain why some people perform better than others with comparable intelligence (Datu, 2021). There are two interconnected dimensions in the conceptual architecture: Interest consistency: The ability to stay focused on particular objectives without frequently changing course. Perseverance of effort: Constant attention to detail when facing challenges or failures. (Kannangara et al., 2018)

There is some evidence that grit is positive and related to a diversity of academic outcomes, and others confirm, grit does not make much contribution in terms of predicting academic outcomes. Engagement mediated the effect of grit and productivity thereby indicating that an individual who had better grit would be more likely to have engagement and that engagement would encourage more productivity to be done in academics. (Hodge, Wright, & Bennett, 2018)

Grit is a trait-level commitment that organises meaning and behaviour over years or decades, in contrast to talent (rate of skill development) or instant effort intensity. According to meta-analyses, consistency of interest has a worse predictive validity for outcomes than perseverance of effort, indicating an uneven contribution to total grit. Grit is positioned in this hierarchical framework as different from but connected to well-known concepts such as self-control (short-term impulse regulation), resilience (adaptive recovery), and conscientiousness (diligence and organisation). (Datu, 2021)

Grit has been posited as a highly influential construct linked to academic success and achievement. It has been found that grit is associated with academic productivity and engagement (Hodge et al., 2017), academic achievement (Pate et al., 2017), perseverance in

challenging tasks (Lucas et al., 2015), task values and goal orientation (Muenks et al., 2016, 2017).

Grit is characterised as a lasting interest and effort in long-term objectives. It has two dimensions namely consistency of interests and persistence of effort. Better grit in early adolescence has been associated with greater engagement in schools and improved academic performance, where gritty students consistently pursue their goals despite failure because they tend to get points and more advancements. Grit also forecasts good life; career success and well-being. Grit is partly trait-like (dependent on personality factors such as conscientiousness), but it can be moulded by experience. Family factors count: warm autonomy-support mothers and fathers help young people to build on an appreciation of perseverance, and harsh or controlling parenting can weaken it. Therefore, an environment in the family where support and independence have a healthy balance allows the young generation to continue working hard in pursuit of what is essential in life. Grit is positively associated with many desirable outcomes. Adolescents and young adults with higher grit tend to exhibit better academic engagement and achievement (Du et al., 2023).

Grit has been established as passion and perseverance on long-term objectives. Beyond school, grit has been linked to workplace success (e.g. job performance, career satisfaction) and positive life adjustment (Du et al., 2023). The willingness to continue working hard and being interested even after failure after months or years is embodied in Du, Li, Xu, and Chen (2023) told. Duckworth et al. (2007) defined grit as an individual trait, which entails two dimensions, persisting effort (efforts put in to make it through the rough times) and consistency of interest (staying focused on a goal without necessarily varying it).

Grittier students are more likely to commit time and effort to studying, resulting in higher grades and persistence in the face of academic failure (Zhu & Bi, 2025). In early

adolescence specifically, longitudinal studies indicate that grit contributes to youths' subjective well-being and positive development. Zhang et al. (2024) showed that in a large sample of Chinese children (mean age  $\approx 9-10$ ), grit and life satisfaction positively reinforced each other over time. They note that during early adolescence, both subjective well-being and grit "have been shown to predict consequential outcomes later in life". This underscores the developmental importance of nurturing grit when children are young adolescents. (Zhang et al., 2024)

The parental encouragement of autonomy (a microsystem factor) could act in coordination with school and cultural factors to influence coping resources (SOC) as well as attitudes (grit) of an adolescent. Parent with autonomy-supportive parenting (microsystem) can tie-up with the decent teacher (another microsystem) to complete the needs of the adolescent. The experience of autonomy support may also be affected by cultural norms in the macrosystem (e.g., values concerning independence vs independent). By recognizing this ecological complexity, the study would place PAS, SOC, and grit in the realistic developmental context and be protective against the cultural malleability of each of these constructs. (Fousiani et al., 2014)

Autonomy support can directly promote grit by meeting the need of youths in terms of competence and relatedness as well as autonomy, which can stimulate their intrinsic motivation toward long-term goals. Recent research also proposes that the autonomy support leads to the increase of gratitude and life satisfaction among teens, and the latter are connected to the larger life satisfaction in a positive manner, which connects in its turn to grit. Overall, an autonomy-supportive family environment can assist in youth learning to make sense of their world (increasing SOC) and accumulating the motivation and means of goal prosecution (increasing grit). (Çelik, 2024)

Autonomy supportive family environment serves two useful functions when it comes to young adolescents, namely, (a) making sense of the world (enhancing SOC) and (b) developing motivation toward goals (enhancing grit). Notably, it is important to determine that SOC can be a moderator or a mediator of this process. To take one example, consideration of the parental autonomy support may partially promote grit by enhancing the integrity and robustness of an adolescent. Although the concrete contribution of SOC to the parenting grit connection remains untested, neighbouring literature (e.g. when it comes to the growth mindset) provides reason to believe this is likely a hot potential area. (Ma et al., 2020).

SDT opines that psychological needs satisfaction will aid perseverance in achieving gritty goal pursuit. Conjointly, current studies show higher persistence in adolescents with greater levels of autonomy support: e.g., teacher and parent support were associated with stability and flexibility in levels of grit (consistency of interest and effort) across time. Succinctly, SDT has a mechanistic explanation: autonomy-supportive parenthood fulfils basic needs that help in the adaptive developmental orientation and demeanor. (Park, 2025)

The available studies on parental autonomy support (PAS) and adolescent outcomes have mostly adhered to self-determination theory, which has indicated that parental autonomy-supportive practice meets the fundamental psychological needs and fosters positive features and motivation. As Du et al. (2023) revealed that the increment in PAS is a precursor of augmented grit through the gratification of needs of the youths with regards to their autonomy, competence, and the need of relatedness (Ma, Ma, & Lan, 2020). Nonetheless, these studies concern SDT mechanisms, and they fail to include the concept of sense of coherence (SOC) of Antonovsky (how much life is perceived as comprehensible, manageable, and meaningful). Whereas other family-to-outcome connections (e.g. PAS

influences growth mindset (Ma, Ma, & Lan, 2020)) have been revealed to be mediated via SOC, PAS and grit models have not been tested. Summarily, the current lack of integrated theories to extensively discuss how autonomy-supportive parenting could support grit by influencing the SOC of the adolescents is unprecedented. Such a gap in the theory implies that we do not have a structure to explain grit development in the concept of SDT (needs satisfaction) salutogenesis (SOC).

#### **1.4 Rationale of the Study**

Adolescence is a critical period for forming enduring motivation and coping resources, yet few studies examine how parental autonomy support (PAS) and adolescents' sense of coherence (SOC) jointly shape grit in early adolescence (ages 10–14). This study addresses that gap by testing whether SOC mediates the PAS→grit relationship, and by comparing maternal and paternal autonomy support and gender differences. Clarifying these pathways informs theory (integrating self-determination and salutogenic perspectives) and practice by identifying whether parent focused or SOC strengthening interventions or both are most likely to foster adolescents' long-term perseverance.

#### **1.5 Problem Statement**

Despite growing interest in factors that promote adolescent perseverance, little is known about how parental autonomy support (PAS) and adolescents' sense of coherence (SOC) jointly influence the development of grit during early adolescence (ages 10–14). Existing studies have largely focused on older youth, treated SOC either as an outcome or mediator but rarely tested its dual role as both mediator and moderator, and have seldom disaggregated maternal versus paternal autonomy support or examined gender differences. As a result, it remains unclear whether parental autonomy support builds grit by strengthening

adolescents' SOC, and whether mothers and fathers differentially shape these processes questions that limit the development of targeted family and school based interventions to foster long-term perseverance.

## **1.6 Research Questions**

- In the absence of parental autonomy support, how do sense of coherence contribute to the development of grit in adolescents, and what role does sense of coherence (SOC) play in this process ?

## **1.7 Objectives**

- To examine the associations between perceived parental autonomy support, sense of coherence, and grit in adolescents.
- To test whether sense of coherence statistically mediates the effect of parental autonomy support on adolescents' grit, using quantitative analysis

## **1.8 Hypothesis**

1. There will be a significant positive relationship between parental autonomy support and adolescents' grit.
2. There will be a significant positive relationship between adolescents' sense of coherence and their grit.
3. Sense of coherence will mediate the relationship between parental autonomy support and adolescents' grit.

## 1.9 Significance of the Study

Although there is growing support in the literature with respect to the importance of grit and autonomy-supportive parenting, very little studies have been conducted to understand how PAS helps adolescents in acquiring grit especially in a collectivist society such as Pakistan where the power of parental influence is central in the family structure. Moreover, although the mediating role of additional psychological resources, including SOC has been reported in international literature there is hardly any information on how SOC mediating the relationship between grit and autonomy-supportive parenting among Pakistani adolescents. Available literature belongs to Western samples and is limited to university/adult groups (Huéscar-Hernandez et al., 2020; Hodge et al., 2018), and there is little information about the same dynamics at an early and middle adolescent age.

Thus, the given study is aimed to fill this gap exploring the correlation between parental autonomy support and grit in adolescents and exploring whether such a correlation is mediated by sense of coherence. This study will be a great contribution in understanding the role that family environment and internal coping orientations play in enhancing perseverance among adolescents particularly in a culture where parental support is important in the development of the young people.

## CHAPTER 2

### LITERATURE REVIEW

Significant changes occur during adolescence in the areas of biology, cognition, social interaction, and emotion. Puberty to the mid-20s is associated with "a profound amount of change in all domains of development biological, cognitive, psychosocial, and emotional," according to the National Academies. Early adolescence, or around ages 10 to 14, is particularly crucial because, despite the renegotiating of peer and familial ties, young people start to develop a more cohesive identity and independent sense of self (National Academies of Sciences, Engineering, and Medicine, 2019). Crucially, increased plasticity is a feature of this developmental stage. Teenagers can gain a lot from a supportive atmosphere because they are becoming more active agents. Adolescents can flourish and develop resilience in environments that are safe and encourage autonomy; on the other hand, hostile or "toxic" environments can impede normal development (National Academies of Sciences, Engineering, and Medicine, 2019).

Parental autonomy support is a component of parenting based on the Self Determination Theory (SDT), which consists of promoting the feeling of choice, agency, and self-direction in the child through active stimulation (Bulow, et al., 2022). In SDT the feeling of autonomy does not mean being independent as such but rather the willing consent of an action of self (Sharma, 2025). Autonomy-supportive parents put themselves in the position of the child, give significant reasons to make demands, given a choice that exists and accept the questions and comments of the child (Neubauer et al., 2021). In contrast, controlling parenting ("psychological control") involves guilt, shame, pressure and helps a child to lose its autonomy. Autonomy support by parents consequently fulfils the basic psychological need

of adolescents to have autonomy (Bulow, et al., 2022) that advances intrinsic values, self-initiative and healthy value internalization.

Parenting practices that actively promote a child's choice, self-initiation, and feeling of personal agency are referred to as parental autonomy support, or PAS. Joussemet et al. (2008) state that PAS entails actions like giving the child meaningful explanations for regulations, respecting their viewpoints and feelings, giving them choices within reasonable bounds, and refraining from using language that is coercive or controlling. Crucially, autonomy support is not the same as indulgence or permissiveness; rather, it is a well-rounded strategy where parents maintain a high level of involvement while offering structure and clear expectations. PAS promotes the best possible developmental results when paired with appropriate organisation and participation, which are traits of authoritative parenting (Joussemet et al., 2008). On the other hand, it is completely opposed to psychological control techniques that weaken a child's free will and innate drive, including making them feel guilty or denying them affection. Support for autonomy is especially important in the early stages of adolescence, when identity development is more intense and the power dynamics between parents and children gradually change. Parents can encourage independence in their children between the ages of roughly 10 and 14 by having candid conversations about regulations, paying attention to their opinions, and involve them in developmentally appropriate decision-making (Joussemet et al., 2008).

McCurdy et al., (2020) observe that early/middle adolescents fare well when their parents encourage and give them opportunities to make decisions that are endorsed by themselves. Practically, it implies that the parents can be asked to elaborate on the decision-making as well as seek parental feedback and tolerate being overruled on acceptable options (e.g. homework time, chores). Self-regulations and self-efficacy are generated by the kind of

PAS. In fact, higher self-regulation, social competence and improved emotional health have all been shown to be correlated with PAS in adolescence on numerous occasions. To illustrate, researchers Brenning et al. (2015) also concluded that the perception of parents providing autonomy support is connected to reduced depressive expressions and improved adjustment in adolescents.

The validity of these connections is at the moment (2020-2025) being tested by contemporary studies. In a diary study of Dutch families, it was showed that days with more autonomy-respective parenting than during baseline days, were associated with more prosperity in teenagers (greater positive affect and less negative affect) than on days that parenting was not autonomy supportive (Bulow, et al., 2022). There was almost a blanket effect: need supportive parenting (warmth and autonomy) proved beneficial to the effect of adolescents in 91-98% of the families examined. In this, it would be in line with the argument of SDT that need-supportive parenting is overall advantageous to youth regardless of culture (Bulu, et al., 2022).

In new studies, the belief that parents are autonomy providing is related to grit consistently. More specifically, those adolescents who think that their parents are autonomy supportive report a higher level of grit. Such a correlation was, for instance, supported by a survey of Chinese students of universities conducted by Du et al. (2023), according to which it was found that the perceived autonomy support of parents had a positive relationship with the grit of students. Du et al. (2023) stated that parental autonomy support had a positive correlation with grit. They demonstrated that the influence of autonomy support on the constituent of perseverance of grit was mediated by satisfaction of basic psychological needs in agreement with the predictions of SDT. In the same way, Celik (2024) conducting a literature review points out that parental autonomy support helps boost grit levels by

improving the initial levels of psychological necessity and, as a result, producing enhanced motivation. This evidence builds upon SDT in the case that being an autonomy-supportive parent will aid in the achievement of an adolescent in need of their autonomy and competence needs, which subsequently builds a passion and perseverance that is very much a part of grit.

This factual correlation is in accordance with theory. Autonomy support also fulfils the desire of the teens to choose and gain knowledge by gaining internal motivation and therefore provide them with the self-confidence to sustain their problems over the long-term (with Çelik, 2024). When parents recognize the perspectives of the children and promote self-initiation, adolescents tend to persist longer (more persevering) and remain, more reliably, engaged in interests (more consistent). Qualitative design implies that autonomous parenting with adolescents provides them with a sense of possession in their goals, which makes them resilient against misfortunes. Even those studies not including grit as a measure also suggest autonomy support can play a role: A Turkish study associated autonomy support with better academic motivation and self-control in adolescents (Golk, 2019), and an American study reported that autonomy support among teachers was related to greater effort among students (an element of perseverance) (Kusurkar et al., 2013).

A positive connection can be proved by showing the experiment results on younger adolescents. Park et al. (2025) showed that perceived parental support of autonomy was significant in predicting the two dimensions of grit consistency of interests and perseverance of effort in a large Korean panel of middle-school students (ages approximately 11 to 14 years old). Park et al. was able to demonstrate that both of the subfactors of grit were characterized by stable trait variance and state changes over time using a trait-state model. More importantly, both teacher and parental support had a positive influence on the following

grit factors: parenthood and teacher relationships have a positive influence on the trait and state of grit. This implies that autonomy-supportive parenting is a factor that is involved in the long-term and crisis components of grit of adolescents in different conditions. On the same note, a cross-sectional analysis of Pakistani high-school students (ages 15-19 years) revealed that the perceptions of parental autonomy support were positively associated with the grit of adolescents (i.e., perseverance and consistency) (Zulfiqar & Akram, 2025). According to Zulfiqar and Akram (2025), both perseverance of effort and consistency of interest registered a positive correlation with parental autonomy support and a negative correlation with psychological control. That is to say, teenagers whose parental figures made them feel that they provided a chance in choice, valued their sentiments and provided justifications were likely to get higher scores in grit. Even autonomy support was a positive predictor of grit in the regression analyses. Remarkably, Zulfiqar et al. discovered that Pakistani adolescents regarded maternal and paternal autonomy-support the same way and this was in terms of the fact that supports by both parents are grit-enhancing.

Autonomy support seems to be helpful to grit. The present study by Feng and Lan (2020) involved examining the outcomes of Chinese Adolescents who had lost a family member (13 to 18 years old). They came up with profiles using both parental and teacher autonomy support (e.g. high parent and high teacher versus the rest). They discovered that adolescents who had high parental provision of autonomy support (more so when they also had high teacher support) had improved results related to grit. In their analyses, grit dimensions showed negative correlations with externalizing behavior where they found support only among situations of high support. The researchers came to the conclusion that the interaction between grit and autonomy support provided by parents and teachers has a profound impact on adaptive behavior (Feng & Lan, 2020). Practically, less behavioural problems were found in gritty adolescents whose parents were autonomy supportive.

Although it was studying bereavement, this plays to the idea that autonomy support is protective in allowing the benefits of grit. In addition to that, these patterns are presented in school-located research: a favourable home environment indicated grit higher in students (Liu, Cho, & Liu, 2025). Specifically, Park, (2025) discovered that Korean middle-school grit and engagement in autonomy-supportive parenting styles rose.

De Haan et al. (2022) surveyed the dynamics of autonomy support in 159 Dutch families (100days) and measured the daily effect of adolescents. The results of their study revealed that on an individual day in which a teenager experienced more autonomy support than expected on average, the positive mood and negative mood were higher. This direct evidence within subjects establishes that the effects of autonomy supportive acts are immediate in terms of their emotional advantage. Notably, this research has also illustrated that these positive associations were present “in (almost) every family”, justifying the very concept of universal benefit (although with personal differences in its billion) (Bulfow et al., 2022).

Sense of Coherence (SOC) developed by Antonovsky (1979, 1987) has a global orientation which refers to believing, by an individual, that (1) life events are organized and understandable, (2) life is manageable (one has resources to cope) and (3) life makes sense (challenges are worth investing). A good SOC is viewed as one of the resilience factors allowing people to cope with the stress successfully and stay healthy (Idan, et al., 2022). As an example, the measures in a children SOC scale represent these dimensions (I feel that I do not know what to do in class lack of comprehensibility; when I want something, I am sure I would get it manageability; I am interested in lots of things meaningfulness)(Idan, et al., 2022). Higher SOC in adolescents perceives the world as a well structured place that can be controlled and this facilitates adaptive coping. The presence of parental actions that

encourage independence (including clarifying expectations, demonstrating confidence, and considering the views of the teen) is likely to support the feelings of the adolescent that life makes sense and one can cope with any challenges. Within SDT terms, the autonomy support fosters internalization (e.g., competence such as confidence in problem solving) and relatedness (feeling understood) that are, in turn, very well aligned with components of SOC. Although more extensive research has been done on SOC in health settings, a connection between salutogenesis and SDT is possible and supportive parenting might assist in enhancing the SOC of an adolescent. An example is given by the fact that people with high SOC do not fragment life experiences and are capable of keeping a sense of purpose, which can be supported by parental behavior that makes life experiences clear, normal, and rational to their offspring (Ma, Ma, & Lan, 2020).

Sense of coherence itself has often been conceptualized as a resilience factor, a meta-review determined that sense of coherence can be characterized as a resilient factor during adolescence (Nielsen & Hansson, 2007). SOC is the idea that life has meaning and is controllable by the adolescents and can therefore stand up to stress. Analogously, the concept of grit constitutes endurance of hard knocks that is synonymous with resilience. Indeed, grit has been found empirically to protect against adversity: in Finnish youths, it softened the negative results of school burnout on depression and loneliness: high grit (perseverance and consistency) had a strong negative effect the adverse impacts of school burnout in depression and loneliness (Tang et al., 2021).

Adolescence may be a time when SOC is still forming and can take many various forms. In contrast to the relatively stable SOC of adjusted adults, Antonovsky himself claimed that teenagers' SOC is highly vulnerable and variable (Omiya & Deguchi, 2025). Studies conducted in the last five years have demonstrated the importance of SOC to young

people's wellbeing. For instance, Matić and Vuletić (2025) observed Croatian teenagers between the ages of 15 and 17 and found that, during the course of their two-year study, SOC was very consistent in mid-adolescence. Notably, the mental and physical health (functioning, vitality, emotional well-being) of the youth with higher SOC was significantly better overall. In that sample, boys' SOC was slightly greater than girls', and both SOC and health were positively correlated with living with both parents. Building SOC throughout adolescence may have long-term benefits, according to the authors' conclusion that SOC is a "significant and stable factor" linked to adolescent health (Matić and Vuletić, 2025).

A recent study based in Japan during the COVID-19 period demonstrates how SOC can also change to be more stressed. Omiya et al. (2025) followed a cohort of students before and after pandemic in junior high school. They noted that disruptions caused by the pandemic reduced the feeling of coherence in most adolescents. In one instance, "meaningfulness" (one component of SOC) declined considerably in the students who enrolled during the pandemic and those students exposed to pandemic disruptions lost part of the pre-pandemic SOC gains. The paper gives an account of how unitary SOC is a resilience resource during adolescence: those with higher levels of SOC can be better equipped to endure a crisis, yet serious crises can undermine SOC (Omiya et al., 2025).

As a resiliency orientation, SOC represents people's perspectives on life and how simple or complex they see things to be. Adolescents' ability to make sense of their experiences and develop coping skills has been connected to the experience of nurturing SOC through supportive parents. By providing explicit explanations and encouraging problem-solving, parents who encourage autonomy can help their children gain a greater awareness of the world. In the meantime, teenagers who are allowed to exercise controlled choices may feel that obstacles are more manageable thanks to the principle of controlled choices. Finally,

when parents respect and care for their children's interests, their support and gratitude give their actions meaning. Theoretically, autonomy support takes into account all of the SOC dimensions. Parental sustenance ensures the existence of resources (manageability), parental decisions to deframe and explain make life events more predictable (greater comprehensibility), and considering the child's perspective on what is meaningful confirms that life is meaningful. SDT holds that meeting an adolescent's autonomy requirements will have a favourable impact on their sense of agency in a cohesive environment (Deci & Ryan, 2000).

Empirical Some are suggestive with little empirical support. Ma et al. (2020) found that a development mindset was a social predictor of feeling of coherence, which was positively connected with perceived parental autonomy support in a large sample of Chinese undergraduates. In fact, according to their structural model, the relationship between parental autonomy support and attitude was fully mediated by sense of coherence. It was demonstrated that the ensuing sense of coherence was positively correlated with both teacher and parental autonomy support (Ma et al., 2020). In other words, adolescents who received greater parental autonomy support scored higher on SOC. The study provides direct evidence that autonomy support can enhance adolescents' self-reported quality of life (SOC), even though it is based on a more mature sample. It demonstrates how autonomy support most likely helps young people form a coherent viewpoint on life's necessities. Notably, Ma et al. made the assumption that having a strong SOC helps students to achieve inner harmony and ultimate purpose (meaningfulness) by synthesising important aspects of their lives as a single entity (comprehensibility and manageability). Consequently, they often draw the conclusion that their findings demonstrate the value of autonomous support in enabling the real components of SOC since it promotes comprehension and a sense of purpose in life (Ma et al., 2020).

According to a Finnish cohort research, the likelihood of receiving a mental health diagnosis at age 18 decreased by roughly 4% with every unit rise in teenage SOC (tested at 15). This demonstrates how well SOC predicts psychiatric outcomes. Thus, SOC can be evaluated by clinicians and school counsellors to determine which teenagers require resilience-building. In order to strengthen SOC, therapeutic techniques (such as cognitive behavioural therapy, mindfulness, and narrative therapy) frequently seek to improve clients' sense of purpose and stress management. Similarly, strategies to increase grit and parental support are becoming more and more common in treatments for anxiety or depression. To help adolescents cope better, family therapy might, for instance, teach parents autonomy-supportive techniques. Although there are currently few systematic outcome studies, practice recommendations already incorporate these constructs (Carlén et al., 2020).

There are few studies on teenager particular to SOC and parenting style but family environment research has complemented parenting as a supportive family environment is essential to SOC. As an example, family cohesion, a proxy of supportive family climate is strongly associated with SOC in children of school age. Al-Yagon and Margalit (2011) also observed that elementary-school children (10-12 years old) belonging to cohesive family groupings showed highest child levels of SOC, and those in less cohesive family groupings had significantly lower levels of SOC (Idan et al., 2022). Dynamically, a stronger sense of coherence is developed when adolescents perceive themselves to be living in an integrating and cognizing on most occasions a supportive parent-child autonomy family. In the same vein, SOC also has been associated with attachment security in youth: more globally secure SOC was recorded in the children that genuinely felt attached to both parents compared to those that perceived themselves attached to either one or neither of the parents (Idan et al., 2022). This implies that with the full support by the parents, the world becomes more organized and easy to handle to the adolescents. Though the concept of attachment security

implies generalness in emotional support, the security is associated with parents having the capacity to grant autonomy in the healthy functioning families. These results, therefore, indirectly favor the impression that caregiving which is autonomy supportive (it is the nature of secure, intact families) builds SOC.

Direct adolescent outcomes are small, though can be deduced based on other outcomes of SDT backers. The well-being and reduced stress as adolescents are known to be predicted through autonomy support (Jang et al., 2016). When the adult and emergent adult are studied, autonomy-supporting relationship is found to contribute to the experience of life meaning and purpose (components of SOC). Considering an example, one study of pooling young people in contemporary Tibet and mainland China in emerging adulthood discovered that parental support in autonomy was indirectly connected to psychological well-being through resources, such as SOC (however, SOC was not exactly measured in that article (Lan, Ma, & Radin, 2019).

There is a positive relationship between good well-being and high SOC (Piiroinen et al., 2022). It is postulated to cushion against stresses and psychological psychic issues and serves more as an internal court model that enables young people to perceive difficult situations favourably and to endure hardships. SOC is more likely to grow with age and maturation, particularly, in the case when adolescents develop within favourable spheres (e.g., belonging to school, family support) (Yamazaki & Togari, 2011), however, it is also susceptible. Although the SOC during early adolescence is critical, this group is less researched compared to the adults; the realized results above are on junior high to high-school samples. The construct however provides a salutogenic set of a view on youth development to complement risk-based patterns with focusing on the strengths of adolescents in coping and finding meaning (Omiya & Deguchi, 2025).

Grit is the definition of the enduring interest and motivation towards extremely long-term objectives (Du et al., 2023). Grit is a term introduced by Duckworth et al. (2007) by joining two dimensions of grit that are perseverance of effort (the willingness to work hard and remain committed in spite of setbacks) and consistency of interests over time (Du et al., 2023). Methodologically a gritty adolescent is the one who is not easily deterred by slow progress or the pitfalls in the way to the achievement of some end (e.g. academic, a sport, a hobby, etc.) despite the passage of years. Interestingly, grit refers to a conceptually different (but related) trait, conscientiousness, grit has a narrower focus on staying the course in the face of long-term difficulties.

Grit is known to facilitate adaptation to the numerous changes (e.g. transferring to a new school, the onset of puberty) in early adolescence. A recent, COVID-era study of middle-schoolers (Mage =13) by Zhu and Bi (2025), showed that more gritty students asserted greater future academic and life aspirations despite the pandemic turtles. Specifically, the perseverance aspect of grit was estimated to be correlated with larger education and life possible self goals, whereas self-control and SES were controlled (Zhu & Bi, 2025). That implies gritty adolescents will be more optimistic and goal-directed, which is presumably an adaptive response to life difficulties.

Grit feels to be something deeply held but un-fixed. Grit is moderately heritable, but life contexts do so. As an example, Park et al. (2020) reported reciprocal growth: students with a perception of a learning-oriented school culture had an increase in grit over the course of a year, which was in turn associated with higher grades. Grit in adolescents can thus be nurtured by use of educational environments that are enabling with autonomy support or those that are master-oriented. In adolescence grit is connected with the environment as well as personality. According to longitudinal data, the gritty adolescents will gradually grow into

having a more intense growth mindset on the subject of effort and vice-versa. The extent to which grit is an individual difference, with a bit of contribution in heritable factors, is also malleable: the school and family contexts matter. Take the case of American middle schoolers who were placed in classrooms that focused on learning material, not just learning-for-itself culture ones, and were found to experience improving grit over time, which further was ultimately correlated with higher grades. There was a higher grit in the adolescents whose parents were supportive of autonomy (meeting their psychological needs). Adolescents having high grit declare more emotional engagement in academics and goal accomplishment (Park et al., 2020).

In theory, autonomy support by the parents would promote grit by fulfilling the needs by the adolescent to feel a sense of autonomy and competence, which makes them driven towards long-term commitment. The empirical evidence of the recent authors backs this up. Du et al. (2023) found out that greater parental autonomy support in a Chinese sample of college students is associated with a higher grit. The structural equation modelling revealed that the satisfaction of basic psychological needs (based on SDT) mediated the association that existed between PAS and perseverance that, autonomy-supportive parents assist children to develop feelings of competence and self-regulated, and consequently, the children are in a position to persist in goals.

Lam et al. (2025) analysed early adolescents (age 11-15) whose parent died of an illness or divorce. They discovered that positive parenting behaviours such as nurturing autonomy and less control had a higher influence that boosted adolescent gratitude and life satisfaction and eventually higher grit in the long run. This is to say that teenagers raised under the parenting style that highlights choice and support had greater chances to have grit (mediated by gratefulness). Practically, these results indicate that in cases where parents are

respectful of the opinions of adolescents and motivate them to pursue their interests (characteristics of homeostatic support), it makes teens more driven and resilient. The autonomy support is bound to support the perception that the teen can do what they set out to accomplish, thereby nurturing determination. Conversely, highly controlling parenting is soul sucking, and grit killing. Contrary to numerous works on grit influencer, especially involving peers or school, the family does appear to play an influential role. The available evidence, although scrupulous, informs of positive interrelation amid PAS and adolescent grit. Further studies should shed light on that relationship in younger adolescents and examine the possibility of raising grit among adolescents through parent-level interventions that teacher parent autonomy promoting skills. (Lam et al., 2025)

The approaches of personality development theories present another side. Grit has strong relations to the Big Five personality trait of conscientiousness (self-discipline, organization). Even Duckworth herself points out that, grit has very minimal additional contribution to success when stuffed with conscientiousness. This is in line with findings seen in a study conducted in Taiwan that administered a questionnaire on adolescents showing that conscientiousness, agreeableness and openness (but not extraversion) to a large extent predicted grit amongst the adolescents. It implies that grit is partially influenced by stable personality traits shaped by both genetics and early environment. Grit in personalities theory (Costa McCrae) grit would be considered a characteristic of conscientiousness that came to a stable level during late adolescence. Autonomy support by the parents can then interact with these traits by promoting self-determined motivation: e.g. a child with many conscientiousness points might be at a marked advantage when parents support choice and competence (as SDT recommends), because it strengthens the persistence in goal pursuit. (Lin & Chang, 2017)

Gritty individuals perform better in academics (like Grade point average), have a higher education degree, and are retained more in job situations even after controlling by intelligence. As an example, it has been reported that USA. Duckworth et al. (2007) demonstrated that in the predicted college success grit was a bigger predictor than IQ. The predictive value of grit is confirmed in recent longitudinal research done on thousands of adolescents. According to a study by West and colleagues (2021), the combination of grit and growth mindset supported one another in the adolescent context during the course of four years (Park, Tsukayama, Yu, & Duckworth, 2020).

Sigmundsson *et al.* (2024) ran a novel “I CAN” intervention in Norwegian 10th-grade classes. This two-session program (2×45 min) taught students about brain plasticity, deliberate practice, and “turning on the switch” of personal growth beliefs. In a randomized trial (421 students), the intervention group (versus an active control) exhibited a significant increase in grit scores among boys post-intervention. While effect sizes were modest and did not appear in girls, this study provides the first experimental evidence that even a brief classroom program can elevate adolescents’ perseverance beliefs. The program’s curriculum drew on Bandura’s social learning (using role models and feedback) and Edelman’s neural group selection theory (repetition reinforces brain circuits) (Sigmundsson et al., 2024)

## Chapter 3

### METHODOLOGY

This study aims to examine how parental autonomy support, adolescents' sense of coherence, and grit are interrelated, and specifically whether sense of coherence mediates the effect of parental autonomy support on grit. Parental autonomy support is theoretically linked to better coping and motivation in youth. Sense of coherence (viewing life as comprehensible, manageable and meaningful) is a protective orientation that promotes resilience. Supportive parenting may foster adolescent grit, potentially through strengthening the adolescent's sense of coherence. The present study therefore investigates whether parental autonomy support is positively related to grit, whether adolescents' sense of coherence is positively related to grit, and whether sense of coherence statistically mediates the parental support grit link.

#### 3.1 Research Methodology

This study used a cross-sectional, correlational design. That means the data were collected at one point in time using a survey, and no experiments or changes were made to the participants. All three variables perceived autonomy support, sense of coherence, and grit were measured at the same time. The data will be analysed to see how these variables are related to each other.

#### 3.2 Population and Sampling

The target population consisted of Pakistani adolescents aged 13 to 18 years. A total sample of  $n = 328$  participants was obtained through purposive sampling of high schools in

Pakistan. Purposive (non-probability) sampling was used to ensure inclusion of adolescents across the age range (early to late teens) and from varied socioeconomic backgrounds.

### **3.2.1 Inclusion criteria**

The inclusion criteria included, participants being adolescents aged between 13 years and 18 years, and currently in a high school or secondary school program. More than that, respondents had to have adequate literacy insight to peruse and grasp the language of the questionnaire thus facilitating the capability to grasp items and also in giving the respondents significant answers. Such criteria were stipulated so as to ensure that the right stage of development is reached and to ensure that validity and reliability of information obtained is guaranteed.

### **3.2.2 Exclusion Criteria**

Individuals with severe cognitive impairments as diagnosed in school records or by a teacher report were not included in the tests so that the adolescents could understand and answer the survey items meaningfully. Also, those who were outside of the stated age groups were not considered as participants of the study. In order to uphold the accuracy and reliability of the data set the questionnaires with numerous missing entries or with plain tendencies to erratic responding (i.e., same answers given more than once with no variations), as well as to those individuals that refused to participate at any stage of data collection, were not included in the final analysis.

## **3.3 Data Collection**

### **3.3.1 Informed consent form**

Participants were required to provide informed consent before taking part in the study. The consent form included an explanation of the study's purpose, and the voluntary nature of

participation. Participants signed a consent form acknowledging their understanding and they were informed that they could withdraw from the study at any stage without facing any penalties. Here is the consent form:

I am Laeeba Mir, student of MS Clinical Psychology from Bahria University, Lahore. I am conducting research on “Relationship between Parental autonomy support, Sense of Coherence and Grit among adolescent’s” under supervision of Dr. Khawer Bilal Baig. The purpose of this study is to explore the Relationship between Parental autonomy support, Sense of Coherence and Grit among adolescent’s Understanding these associations will provide insights into how parenting practices can shape adolescents’ mental and emotional resilience, offering valuable information for parents, educators, and mental health professionals working with this age group.

The Questionnaire will take 10-15 minutes. It is to assure, that all the information taken from you will be kept confidential and will only be used for research purpose. Your participation is voluntary and you have the right to withdraw from this study at any point.

If you agree to participate, then kindly sign the form.

For queries feel free to contact Researcher Laeeba Mir: [ayub882555@gmail.com](mailto:ayub882555@gmail.com)

Supervisor: Dr. Khawer Bilal Baig, Email: [drkhawerbilal@gmail.com](mailto:drkhawerbilal@gmail.com)

Signature \_\_\_\_\_

### **3.3.2 Demographic Form**

Demographic sheet included questions to obtain basic personal information about the participants. These questions were constituted of age, gender, education, family system, parents' education and other questions to obtain the information thoroughly.

### **3.3.3 Assessment Measures**

#### **3.3.3.1 Perceived Parental Autonomy Support Scale (P-PASS):**

Parental autonomy support was assessed with the Perceived Parental Autonomy Support Scale (P-PASS) that was developed by Mageau et al., (2015). The questionnaire provides 24 self-report questions based on which the degree to which parents support their child in independent decision-making, respect the opinions of the children, and offer them choices is measured. It also evaluates how the parents interpret the cause of their expectations and show regard to the insight of the child even when laying down boundaries. Answering 1 question (example: My parents provided me with a lot of choices about what I wanted to do), the participant should indicate where, on a 7-point Likert scale, compatible with the answers, the individual places him/herself between 1 (Do not agree at all) and 7 (Very strongly agree).

#### **3.3.3.2 Sense of coherence Scale**

The sense of coherence was measured using SOC-29, the first 29-item form of the Orientation to Life Questionnaire by Antonovsky (Antonovsky, 1987). The SOC-29 measures how people interpret life as well organized, predictable and meaningful, their aptitude to understand and direct every problem. It contains three subscales, including Comprehensibility (11 items; the cognitive side of finding events in a logical and predictable process), Manageability (10 items; how people feel about the resources to cope), and Meaningfulness (8 items; the motivational component of feeling emotionally significant to people). Answers to the questions are recorded on a 7 points semantic differential rating scale with anchors

depending on the content of the question (e.g., Never happened to Always happened, or Very often to Very seldom). The scores ranges from 29-203 with higher points indicates higher levels of sense of coherence.

### **3.3.3.3 Grit Scale**

Grit was assessed with the Original 12-item Grit Scale (Grit-O) constructed by Duckworth, Peterson, Matthews and Kelly (2007). The personality trait measured in this instrument is perseverance and long-term orientation passion operationalized in the form of two subscales; 1) Consistency of Interests (six items; representing long-term focus on a single area) and 2) Perseverance of Effort (six items; representing the continuity of action despite the onset of obstacles). Each statement (e.g., Setbacks do not discourage me or I find it difficult to keep my attention on projects that are not completed within a few months) is rated along a 5- point Likert scale where 1 = Not at all like me and 5 =Very much like me. The higher the scores the grittier is the individual. The Grit-O is a validated test with an array of age groups including adolescents

## **3.4 Operational definitions**

### **3.4.1 Parental Autonomy Support:**

Parental autonomy support is characterized by how parents can support the self-initiative of their children, offer meaningful options, and recognize their attitude to create a self-driving and exercise of agency (Mageau et al., 2015).

### **3.4.2 Sense of Coherence:**

The concept of sense of coherence can be described as general life orientation which captures the state of how well individuals can make sense of life, thus making it manageable,

and meaningful, so that they will be able to engage stressors and stay healthy (Antonovsky, 1987).

### **3.4.3 Grit**

Grit is a character trait which is portrayed by perseverance and sustained interest in long-term goals, or in easier terms the consistency of interests and also the persistence on effort over a prolonged period of time (Duckworth et al., 2007).

## **3.5 Procedure of the Study**

First, institutional approval was obtained from the Department of Professional Psychology, Bahria University, to conduct the study titled “Relationship between Parental Autonomy Support, Sense of Coherence, and Grit among Adolescents”. The purpose of the research was explained to the participants prior to data collection. The sample consisted of adolescents aged 13–18 years currently enrolled in secondary or higher secondary school. Data were collected in a comfortable and familiar classroom setting to ensure participants felt at ease during the process. For the use of the assessment instruments in this study the Perceived Parental Autonomy Support Scale (P-PASS), the Sense of Coherence Scale (SOC-29), and the Grit-O Scale permission was obtained from the original authors where required. After obtaining ethical clearance, participants were approached during school hours with the assistance of school staff, who helped facilitate access and maintain a supportive environment. Consent forms detailing the study’s purpose, confidentiality measures, and voluntary participation were sent to parents or legal guardians for signature, and assent forms were obtained from the adolescents themselves. Participants then completed a self-report questionnaire in paper-and-pencil format under the researcher’s supervision. Completion took approximately 25–30 minutes. Throughout the process, anonymity and confidentiality were

strictly maintained. Participants were assured that they could withdraw at any stage without facing any consequences.

### **3.6 Data Analysis:**

Data was analysed using IBM SPSS and SmartPLS. Reliability of the study scales was examined using Cronbach's alpha, and descriptive statistics (means, standard deviations, observed ranges) together with frequency and percentage distributions for demographic variables were computed. Pearson's  $r$  was used to examine bivariate relationships among parental autonomy support (overall, father, mother), sense of coherence, and grit; Pearson's  $r$  is a statistical measure that indicates the strength and direction of a linear relationship between continuous variables and ranges from  $-1$  to  $+1$  ( $0$  indicates no linear relationship). Structural relationships and mediation hypotheses were tested using PLS-SEM in SmartPLS: the structural model was evaluated by estimating standardized path coefficients ( $\beta$ ),  $t$ -statistics and  $p$ -values obtained via nonparametric bootstrapping (5,000 resamples). Mediation was assessed by comparing direct, indirect, and total effects and by reporting the proportion mediated (indirect/total). Finally, gender differences were examined using multi-group analysis (PLS-MGA).

## CHAPTER 4

## RESULTS

Table 4.1

*Frequency Distribution of Demographic Questionnaire (N=328)*

Demographics		<i>f(%)</i>	
Age	13-15	128 (39%)	
	16-18	200 (61%)	
Gender	Male	207 (63.1%)	
	Female	121 (36.9%)	
Academic level	Matric	124 (37.8%)	
	Intermediate	204 (62.2%)	
Type of School	Government	63(19.2%)	
	Private	265 (80.8%)	
Residence	Urban	296 (90.2%)	
	Rural	32 (9.8%)	
		Male (207) <i>f(%)</i>	Female (121) <i>f(%)</i>
Who did you turn to when you need help and support?	Both Parents	86 (41.5%)	48 (39.7%)
	Mother	101 (48.8%)	60 (49.6%)
	Father	18 (8.7%)	9 (7.4%)
	Friends	2 (1%)	4 (3.3%)
What kind of help have you received	Financial help	28 (13.5%)	20 (16.5%)
	Emotional help	74 (35.7%)	45 (37.2%)

the most?	Guidance	105(50.7%)	56(46.3%)
What do you think	Financial help	107 (51.7%)	71 (58.7%)
is the most helpful	Emotional help	86 (41.5%)	42 (34.7%)
support for you?	Educational help	4(1.9%)	7 (5.8%)
	Guidance	10 (4.8)	1 (.8%)
If you don't get	Seek help from someone else	83 (40.1%)	43 (35.5%)
support from your	Try to handle it on your own	108 (52.2%)	70 (57.9%)
parents, then	Feel overwhelmed and	16 (7.7%)	8 (6.6%)
whom do you get	stressed		
it from?			

Note: *f* = frequency, % = Percentage

As shown in Table, 61% of participants were aged 13–15 years and 39% were aged 16–18 years. The majority were male (63.1%, versus female (36.9%)); most were enrolled at the intermediate level (62.2%).

When asked “Who did you turn to when you needed help and support?” both male and female adolescents most often reported seeking support from their mothers. Specifically, 48.8% of males and 49.6% of females went to their mother, while 41.5% of males and 39.7% of females reported turning to both parents. Far fewer relied primarily on their father (males 8.7%, females 7.4%, or on friends (males 1.0%, females 3.3%). With respect to the type of help most received, guidance was predominant for both genders and financial help was least common. When asked “What do you think is the most helpful support for you?”, financial assistance was rated highest by both males and females. Emotional support followed (males 41.5%, females 34.7%) whereas educational help (males 1.9%, females 5.8%) and guidance

were less often perceived as most helpful. In the absence of parental support, most adolescents tried to handle problems on their own (males 52.2%, females 57.9%), a substantial minority sought help from someone else (males 40.1%, females 35.5%), and a small proportion reported feeling overwhelmed and stressed.

**Table 4.2**

*Reliability Analysis and Descriptive Statistics of all Study Scales (N=328)*

Variables	k	M	SD	<i>a</i>	Range		
					Minimum	Maximum	Skew
Parental	M24	158.8	13.3	.70	101	187	-.946
Autonomy	F24						
Support							
Sense of	29	92.8	9.8	.73	58	114	-.771
Coherence							
Grit	12	39.0	4.7	.74	23	50	-.707

The descriptive statistics show that the participants (N = 328) reported relatively high levels of perceived parental autonomy support (M = 158.8), sense of coherence (M = 92.80), and grit (M = 39.08), with scores leaning toward the upper range for all variables. All three scales demonstrate acceptable internal consistency, with Cronbach's alpha values ranging from .701 to .747, supporting the reliability of the measures and the values of skewness for all variables was also showed in ranges of -1 and +1. The negative skewness for all variables (ranging from -0.707 to -0.946) suggests that the distributions are slightly left-skewed, meaning most adolescents scored higher than average. These findings indicate that the sample generally perceives high autonomy support from parents, possesses a strong sense of

coherence, and demonstrates persistent, goal-directed behavior (grit). This pattern supports the suitability of the scales and lays a solid foundation for further correlational or mediation analysis.

**Table 4.3**

*Pearson Product Moment Correlation among Parental Autonomy Support, Sense of Coherence and Grit (N=328)*

	M	SD	2	3	4	5
Parental Autonomy Support	158.8	13.3	.766**	.819**	.604**	.494**
Father Autonomy Support	80.8	7.9		.259**	.343**	.435**
Mother Autonomy Support	77.9	8.8			.602**	.354**
Sense of Coherence	92.8	9.8				.500**
Grit	39.0	4.7				

*\*\*p<0.001 or correlation is significant at the 0.001 level (tailed)*

The results show that parental autonomy support has strong, positive correlations with both sense of coherence ( $r = .604$ ,  $p < .01$ ) and grit ( $r = .494$ ,  $p < .01$ ), suggesting that when adolescents perceive more autonomy support, they also feel life is more coherent and are more persistent toward goals. Notably, mother autonomy support correlates with grit ( $r = .354$ ) and more strongly with sense of coherence ( $r = .602$ ) than father autonomy support does. The sense of coherence itself has a moderate, positive relationship with grit ( $r = .500$ ), indicating that adolescents who find life meaningful and manageable are more likely to sustain effort. The very high correlation between parental autonomy support and mother autonomy support ( $r = .819$ ) underscores that maternal support is a key part of the overall perception. All correlations are statistically significant.

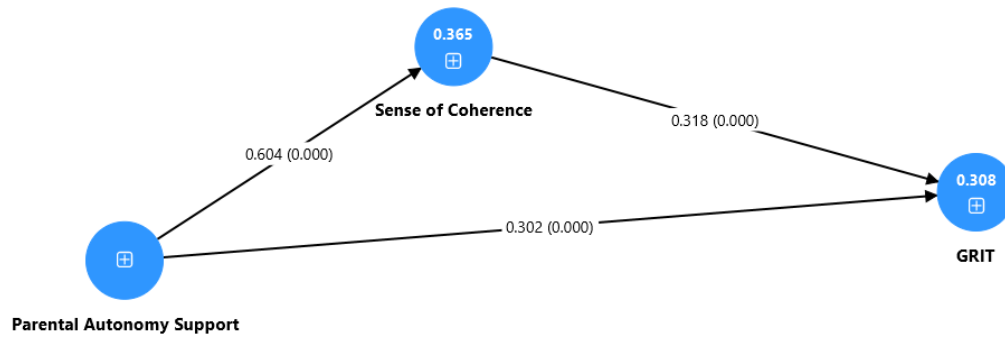
**Table 4.4***Mediation Analysis Parental Autonomy Support (N = 328)*

	Original sample (O)	Sample Mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
<b>Parental Autonomy Support → GRIT</b>	0.302	0.302	0.054	5.554	0.000
<b>Parental Autonomy Support → Sense of Coherence</b>	0.604	0.603	0.039	15.302	0.000
<b>Sense of Coherence → GRIT</b>	0.318	0.316	0.062	5.102	0.000
<b>Parental Autonomy Support → Sense of Coherence→Grit</b>	0.192	0.191	0.040	4.845	0.000

A mediation model was tested using smartPLS to examine whether Sense of Coherence (SOC) mediates the relationship between Parental Autonomy Support (PAS) and GRIT. Parental autonomy support was positively associated with grit ( $\beta = .302$ ,  $t = 5.554$ ,  $p < .001$ ), and it was also strongly related to sense of coherence ( $\beta = .604$ ,  $t = 15.302$ ,  $p < .001$ ). Sense of coherence, in turn, predicted higher levels of grit ( $\beta = .318$ ,  $t = 5.102$ ,  $p < .001$ ). The indirect pathway from parental autonomy support to grit via sense of coherence was significant (indirect effect = .192,  $t = 4.845$ ,  $p < .001$ ), while the direct effect remained significant, indicating that sense of coherence partially mediated the relationship between parental autonomy support and grit. The total effect of parental autonomy support on grit was .494, with approximately 39% of this association transmitted indirectly through sense of

coherence. These results suggest that parental autonomy support contributes to adolescents' grit both directly and indirectly by enhancing their sense of coherence.

**Figure 1**



**Table 4.5**

*Mediation Analysis Mother Autonomy Support and Father Autonomy Support (N=328)*

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
Father Autonomy Support → GRIT	0.295	0.295	0.047	6.238	0.000
Father Autonomy Support → Sense of Coherence	0.200	0.200	0.043	4.616	0.000
Mother Autonomy Support → GRIT	0.059	0.060	0.058	1.024	0.306
Mother Autonomy Support → Sense of Coherence	0.550	0.550	0.036	15.113	0.000
Sense of Coherence → GRIT	0.364	0.362	0.064	5.705	0.000

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Father Autonomy Support					
→ Sense of Coherence→ Grit	0.073	0.072	0.020	3.680	0.000
Mother Autonomy Support					
→ Sense of Coherence→Grit	0.200	0.199	0.038	5.232	0.000

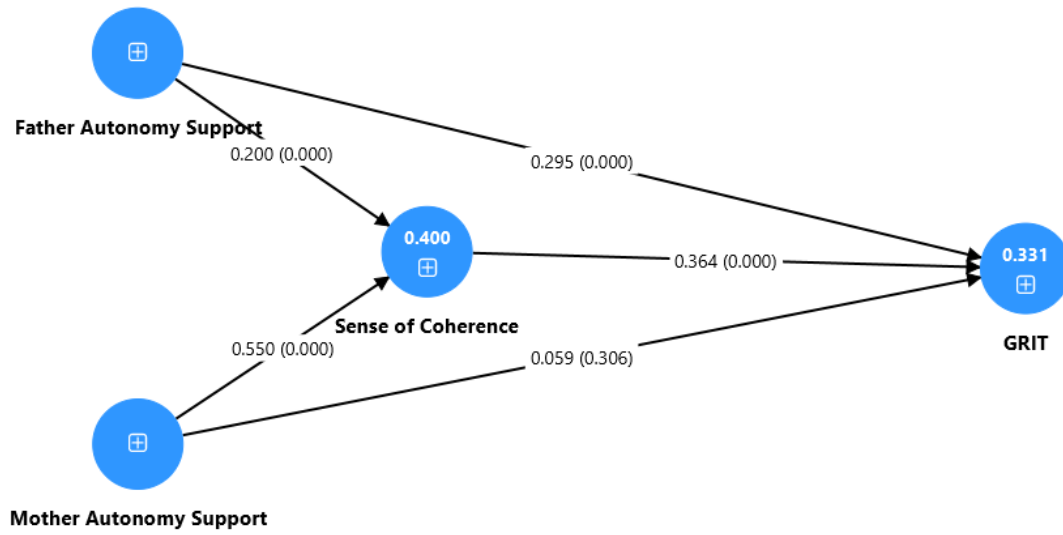
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Separate mediation models examined whether Sense of Coherence (SOC) mediated the effects of father and mother autonomy support on GRIT.

Father autonomy support was positively associated with grit ( $\beta = .295$ ,  $t = 6.238$ ,  $p < .001$ ) and with sense of coherence ( $\beta = .200$ ,  $t = 4.616$ ,  $p < .001$ ). Mother autonomy support was strongly associated with sense of coherence ( $\beta = .550$ ,  $t = 15.113$ ,  $p < .001$ ) but showed a small, non-significant direct association with grit ( $\beta = .059$ ,  $t = 1.024$ ,  $p = .306$ ). Sense of coherence predicted higher grit ( $\beta = .364$ ,  $t = 5.705$ ,  $p < .001$ ). Mediation analyses indicated that sense of coherence partially mediated the relation between father autonomy support and grit (indirect effect =  $.073$ ,  $t = 3.680$ ,  $p < .001$ ), accounting for approximately 19.8% of the total father effect. Conversely, the effect of mother autonomy support on grit operated primarily indirectly via sense of coherence (indirect effect =  $.200$ ,  $t = 5.232$ ,  $p < .001$ ), accounting for roughly 77.2% of the total mother effect consistent with an indirect-only mediation.

**Figure 2**

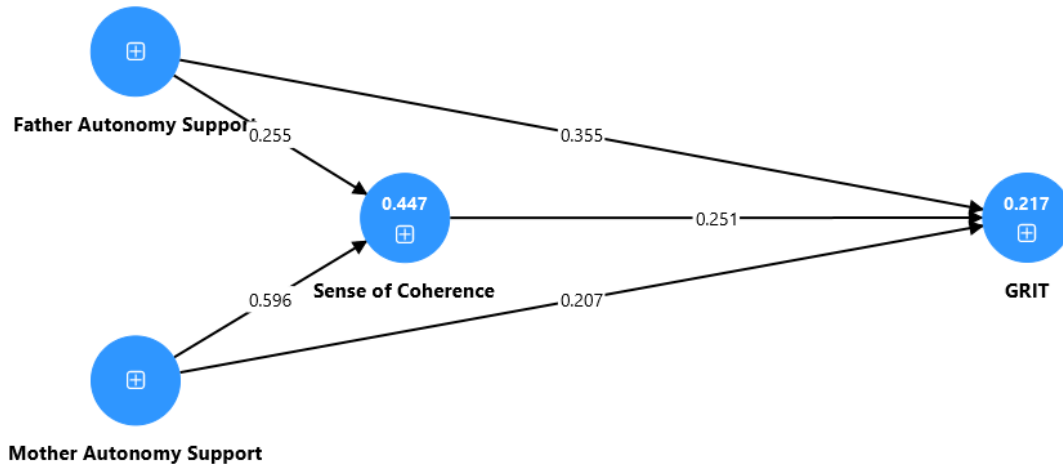
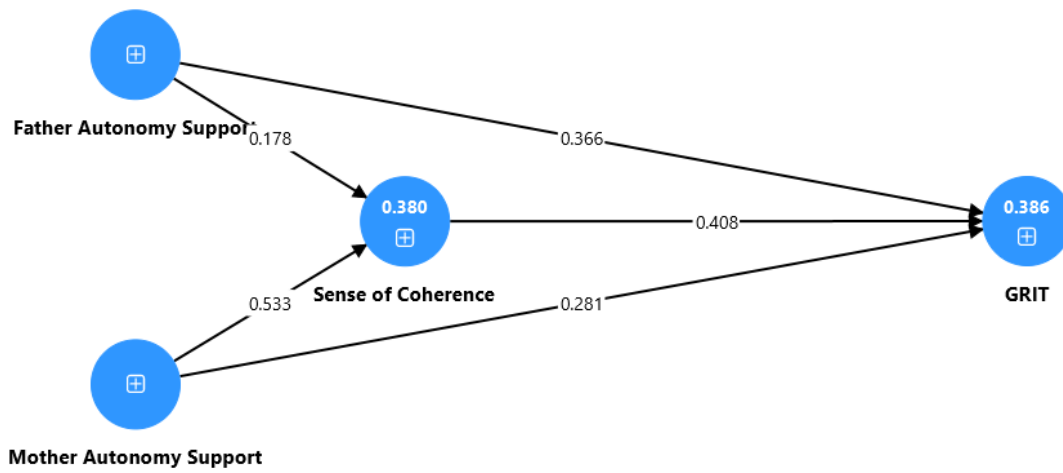
*Mediation Analysis Model of Mother Autonomy Support and Father Autonomy Support*



**Table 4.6***Multi-Group Structural Equation Modelling by Gender*

	<b>Difference (Female - Male)</b>	<b>1-tailed (Female vs Male) p value</b>	<b>2-tailed (Female vs Male) p value</b>
<b>Father Autonomy Support → GRIT</b>	-0.002	0.502	0.995
<b>Father Autonomy Support → Sense of Coherence</b>	0.077	0.182	0.363
<b>Mother Autonomy Support → GRIT</b>	-0.006	0.516	0.969
<b>Mother Autonomy Support → Sense of Coherence</b>	0.063	0.197	0.394
<b>Sense of Coherence → GRIT</b>	-0.157	0.852	0.297

To examine whether the structural paths differed significantly across gender, a multi-group analysis (MGA) was conducted. The results showed that none of the structural paths were significantly different across gender. Specifically, the path from father autonomy support to grit showed a negligible difference between females and males ( $\Delta = -0.002$ , 2-tailed  $p = .995$ ). Similarly, the path from father autonomy support to sense of coherence was slightly stronger for females ( $\Delta = 0.077$ ), but this difference was not significant (2-tailed  $p = .363$ ). The path from mother autonomy support to grit indicated a marginally stronger effect for males ( $\Delta = -0.006$ , 2-tailed  $p = .969$ ), whereas the path from mother autonomy support to sense of coherence was stronger for females ( $\Delta = 0.063$ ), yet non-significant (2-tailed  $p = .394$ ). Finally, the path from sense of coherence to grit was comparatively stronger for males ( $\Delta = -0.157$ ), though the difference also failed to reach significance (2-tailed  $p = .297$ ).

**Figure 3***Structural equation model of Female***Figure 4***Structural equation model of Male*

**CHAPTER 5****DISCUSSION**

We aimed to clarify how Parental Autonomy Support (PAS) from mothers and fathers separately influences grit and SOC, and whether SOC mediates this relationship. Understanding these links can inform how family support fosters youth resilience and well-being. Overall, participants reported high levels of parental autonomy support, Sense of coherence, and grit (Table 4.2), with scale reliabilities in acceptable ranges (Cronbach's  $\alpha = .70-.75$ ). All three measures were negatively skewed, indicating that most adolescents in this sample perceive ample autonomy support and have strong coherence and perseverance. Consistent with our hypotheses, greater perceived autonomy support was significantly associated with higher grit and higher sense of coherence, and sense of coherence itself was positively correlated with grit. Mediation analyses showed that sense of coherence carried a substantial portion of the effect of parental autonomy support on grit, indicating that parental autonomy support fosters grit partly by strengthening adolescents' sense of coherence. Parent specific analyses further revealed distinct roles for maternal versus paternal support, father autonomy support had a direct association with grit as well as an indirect association through sense of coherence, whereas mother autonomy support predicted grit almost entirely via its strong effect on sense of coherence. Finally, multi-group analysis by gender demonstrated that these pathways held for both boys and girls, with some differences in strength.

The aim of the current study of 328 Pakistani adolescents (aged 13-18) was to investigate the relationship between parental autonomy support, sense of coherence (SOC), and grit. The sample was predominantly older (61% aged 16-18), male (63%), attending intermediate-level private schools (62% intermediate, 81% private), and living in urban areas (90%). These demographics indicate that there is a comparatively developed, educationally oriented

background. When it comes to whom the participants go to in case of any problem, boys seem to count more on both parents or the mother (=40-50%), turning to fathers or friends (=7-9%) or neither ( $\approx$ 1-3%). This tendency is also based on the Pakistani culture where mothers (or parents together) are the primary source of support. Regarding the support received, guidance (50-53%) and emotional support (35-37%) were many, whereas support in terms of financial aids was low (13-16%). But when asked about which support was the most beneficial to them, most participants (=52-59) suggested financial fee, followed by emotional support (=35-42), rarely cited was educational help and guidance. These factual reports set the stage to our main findings, i.e., the high perceived involvement of parents (at both levels, parental and specifically maternal) and the appreciation of it, and, yet the prevalence of claiming to be able of coping with parental absence (=35-52% managing it on their own).

### **5.1 Parental Autonomy Support and Adolescent Grit**

Consistent with Hypothesis 1, perceived parental autonomy support showed a robust, positive relationship with adolescents' grit. In our sample, higher parental autonomy support predicted significantly higher grit levels ( $p < .001$ ) (Table 4.3, 4.4). This finding is congruent with self-determination theory, which holds that autonomy supportive parenting fosters young people's intrinsic motivation and adaptive functioning (Bülow et al., 2022). SDT suggests that when parents acknowledge their children's perspectives, offer rationales, and encourage choice, adolescents are more likely to take initiative and persist in goals. Indeed, our finding echoes prior studies: for example, Zulfiqar and Akram (2025) reported in Pakistani high-school students that parental autonomy support positively predicted both facets of grit (perseverance of effort and consistency of interest). Similarly, a study of Chinese college students found that parental autonomy support was positively correlated with grit and that this effect was mediated by satisfaction of basic psychological needs (Du et al., 2023). These consistent results across cultures underscore that autonomy-supportive

parenting acts as a catalyst for adolescents' perseverance. Conversely, controlling parenting (the flip side of autonomy support) tends to undermine grit. Datu (2021) found that excessively controlling parental behaviors negatively predicted adolescents' grit, whereas positive parental involvement (support) predicted higher grit. Thus, our results align with a broad literature indicating that the more adolescents feel free and encouraged by their parents, the more they display passion and persistence toward long-term goals.

This link between parental autonomy support and grit reflects SDT's claim that autonomy fulfillment is a universal psychological need. As one recent daily diary study states, "every adolescent's well-being should benefit when parents provide autonomy support" (Bülow et al., 2022). In that study, autonomy supportive parenting had positive effects in the majority of families. Similarly, by providing autonomy, our participants' parents likely satisfied their children's need for self direction and competence, thereby enhancing motivation and grit. Notably, our findings extend these ideas into the context of perseverance, while SDT is often applied to academic motivation or well-being, our results show it also applies to grit as an outcome. This suggests that autonomy supportive parenting enables youth not only to feel good and motivated, but also to persist in the face of challenges.

## **5.2 Sense of Coherence and Adolescent Grit**

The findings provided support for the second hypothesis, the levels of perceived parental autonomy support had a very strong effect on the sense of coherence of adolescents. In the mediation model, the direct impact of parental autonomy support on coherence was sizeable ( $b = 0.604$ ,  $t = 15.302$ ,  $p < .001$ ). This implies that, when youths perceived parental support of self-initiative and respect of their opinion, they also believed that their life is more understandable, controllable and meaningful. It is theoretically viable that the adolescents

basic need will be satisfied by autonomy supportive parenting because it provides the adolescents with a sense of control and can enhance their global approach towards life hassles. In fact, the past studies have noted that autonomy support substantiates a higher psychosocial functioning and coping. Another example is that one Chinese study revealed that sense of coherence was positively linked to parental autonomy support (Ma, Ma, & Lan, 2020). Our effect size is more significant, probably due to cultural differences with parents influencing a lot the worldview of adolescents.

A high sense of coherence equips a young person with confidence in understanding challenges and mobilizing resources to meet them. It is therefore intuitive that adolescents with strong sense of coherence would also demonstrate greater grit, they see difficulties as manageable parts of life's narrative, lending a sense of purpose that sustains their perseverance. As Moksnes et al. (2021) describe, "a strong sense of coherence helps the individual to mobilize resources to cope with stressors and manage tension successfully". In our findings, sense of coherence explained why autonomy support from parents translated into gritty behavior. Theoretically, this suggests that sense of coherence functions as an inner coping orientation those who believe life makes sense and can be handled (high SOC) are more likely to keep striving toward long-term goals (grit).

We hypothesized (H3) that sense of coherence would mediate parental autonomy support and grit relationship, and this was largely confirmed. In the overall mediation model (Table 4.4), parental autonomy support had a significant direct effect on grit ( $\beta = .302$ ,  $p < .001$ ) and on sense of coherence ( $\beta = .604$ ,  $p < .001$ ), and sense of coherence predicted grit ( $\beta = .318$ ,  $p < .001$ ). The indirect path (PAS  $\rightarrow$  SOC  $\rightarrow$  grit) was also significant (indirect effect = .192,  $p < .001$ ), showing that roughly 39% of parental autonomy support total effect on grit was carried by sense of coherence. In practical terms, this means that supportive

parenting not only has a straightforward positive impact on adolescents' grit, but also works by enhancing their sense of coherence, which in turn boosts perseverance.

Our results echo other research highlighting sense of coherence as a key mechanism linking supportive parenting to adaptive outcomes. Ma et al. (2020), for example, found that SOC fully mediated the effect of parental autonomy support on growth mindset in Chinese undergraduates. In their model, both parental and teacher autonomy support predicted higher sense of coherence, which then predicted a stronger growth mindset. Like growth mindset, grit involves a proactive stance toward challenges, so it makes sense that SOC would bridge support and these positive traits. However, whereas Ma et al. (2020) found full mediation (no direct effect of PAS once SOC was included), our study observed only partial mediation. The persistence of a significant direct path from parental autonomy support to grit suggests that parents foster grit through additional routes beyond sense of coherence. For instance, autonomy-supportive parents may also instill discipline, model perseverance, or create opportunities to confront challenges processes not fully captured by sense of coherence. Conversely, the strong indirect pathway we saw for mother autonomy support implies that mothers' support enhances grit almost entirely by reinforcing adolescents' inner coherence.

Comparisons between father and mother models shed further light (Table 4.5). For father autonomy support, both the direct path to grit ( $\beta = .295, p < .001$ ) and indirect path via SOC (indirect  $\beta = .073, p < .001$ ) were significant. This indicates partial mediation as fathers' autonomy support promotes grit both directly and by modestly strengthening sense of coherence. In contrast, mother autonomy support had a very small, non-significant direct effect on grit ( $\beta = .059, p > .05$ ) but a large effect on SOC ( $\beta = .550, p < .001$ ). The indirect effect through sense of coherence ( $.200, p < .001$ ) accounted for roughly 77% of mothers' total effect on grit. In other words, mothers' support translates into gritty perseverance almost

entirely by enhancing adolescents' sense of coherence, whereas fathers' support also encourages grit through other means.

This distinction is probably due to cultural roles of parents. In most Pakistani households' mothers act as the main caregivers and the emotional support system of the adolescents. They might give them a sense of meaning and understanding, therefore, adding extensively to coherence. In fact, Pakistani studies in the past indicate that the effect of maternal parenting on the outcomes of adolescents is usually more reflective than paternal parenting (Kausar & Pinguart, 2016). In our analysis, the overwhelming determinant of sense of coherence is the autonomy support exerted by the mothers. Fathers, conversely, may lay stress on individuality, struggle, and training, which in a direct way stimulate persevering. Our result that paternal support has a direct impact on grit fits well in this view.

These patterns suggest that sense of coherence is an especially important mediator for the mother grit relationship. One interpretation is that mothers, perhaps through daily caregiving and emotional attunement, primarily influence how adolescents make sense of their lives (SOC), and this understanding then fuels their persistence. Fathers may play a more overt role in modeling determination or granting responsibility, yielding a direct boost to grit. While speculative, such nuances reflect that different parental roles can shape adolescents' coping and motivation in distinct ways. Importantly, all mediation paths reported here were significant, consistent with a self determination perspective that need-support (autonomy support) operates through psychological processes to produce positive adaptation (Bülow et al., 2022).

Our multigroup analysis examined whether these pathways differed for male and female adolescents (Table 4.6). In general, the patterns of effects were similar in both genders, though some effect sizes varied. Notably, the effect of father autonomy support on

sense of coherence was stronger for females ( $\beta = .255, p < .001$ ) than for males ( $\beta = .178, p = .002$ ), suggesting that girls' sense of coherence may be more sensitive to paternal support. Conversely, mother autonomy support had a stronger influence on grit for males ( $\beta = .281, p < .001$ ) than for females ( $\beta = .207, p = .017$ ), indicating that boys may especially benefit in perseverance from their mothers' support. Across both genders, mother support was a very strong predictor of SOC ( $\beta = .59$  for girls,  $.53$  for boys), and father support positively predicted grit ( $\beta = .36$  for both).

Although there were differences in parent type, gender of the adolescent was not a significant moderation factor. The multigroup tests between the two genders (boys and girls) did not yield any significant difference in any of the paths (all  $p$ -values  $> .18$ ). This implies that both boys and girls in our sample were equally affected by the support of autonomy in parents. This observation corresponds to that made by Zulfiqar et al. (2025), who found the following genders shared the same view in dissimilarity between the maternal behaviours and paternal behaviours. Practically, Pakistani boys and girls might differ in the average level of grit or coherence (girls have higher grit, as shown above), but the advantages enjoyed by Pakistani children with autonomy-supportive parents are the same.

Our findings can also be explained by the gendered division of labour in Pakistan (Jeong, Siyal, Fink, McCoy, and Yousafzai, 2018). Qualitative studies conducted in rural Pakistan reveal fathers paying attention to bringing in incomes, supplying resources and taking on outings, mothers taking care of feeding, housework, and the daily care. Fathers are important because of their potentialities as provider, so both boys and girls identify their fathers as transmitters of resourcefulness and problems solution. The constant presence of mothers takes the form of heightened guidance and emotional support of children by their mothers. This probably enhances the sense of coherence in a child the feeling that there is a logical and comprehensible explanation behind the events in life since in most cases; mothers

do assist in explaining and coping with the daily problems. Differently fathers influence might be more linked to go out and solve problems and this promotes grit among the children.

These results imply subtle gender dynamics that Fathers' autonomy support somewhat equally fosters grit in boys and girls, but particularly augments girls' coherence, whereas mothers' support most powerfully enhances coherence in both sexes and then bolsters grit more in boys. One possible interpretation is cultural that in Pakistani society, mothers often provide nurturing guidance that helps all adolescents (especially girls) make sense of challenges, while fathers may model determination that both boys and girls internalize with daughters translating it more into meaning (SOC) and sons translating it more into direct perseverance (grit). Ceresnik and Čerešňíková (2024) similarly reported that older boys showed greater grit (driven by passion) compared to girls. However, the general pattern is that autonomy support from either parent is beneficial for both sexes, consistent with SDT's notion of universality. Indeed, a self-determination framework predicts positive effects of autonomy support for all adolescents (Deci & Ryan, 2012), though it allows for variability in strength. The differing path coefficients align with SDT's "universalism without uniformity" stance: need-supportive parenting is beneficial for every adolescent, but individual differences (here gender-related) modulate the exact magnitude of effects (Soenens et al., 2017).

### **5.3 Theoretical and Practical Implications**

These results have a number of implications to the study. Theoretically, they help to explain the hypothesis that grit can be applied to Self-Determination Theory: parenting autonomy support seems to fulfil the basic needs of adolescents and consequentially boost their perseverance. Our paper augments SDT and Antonovsky salutogenic model in the sense

that it demonstrates the interplay between the outer (parental) and inner (coherence) resources in producing grit. This integration implies that there is a development mechanism such that the encouragement of autonomy in parents leads to the development of an overriding sense in adolescents that life is predictable and meaningful; this phenomenon leading to the persistence required to achieve long-term goals.

In practice, the findings are of benefit to parents and educators. They emphasise the importance of specific parenting behaviours with respect to autonomy support, e.g. providing appropriate choice, providing empathetic rationales, and valuing the views of teenagers in fostering their grit. A parenting program and family interventions can thus focus on such behaviours. Since we found mothers to be a principal source of support, it is important that such programs focus on involving mothers to advance autonomy, in addition to ensuring that fathers are actively embracing an autonomy-supportive approach.

#### **5.4 Limitations and Future Directions**

There are a lot of limitations, namely, because it is cross sectional no causal inference is possible, the model of mediation appears to fit well the theory, however it requires longitudinal or experimental research in order to determine a time-sequencing. All measures were of the self-report kind, therefore there is a potential of a shared-method bias, parent report or objective measures on behavior can be incorporated in the future. The sample has been selected among the Pakistani youth in the schools within urban setting and consideration of cultural issues might also be on the table and therefore a replication within a new socio-cultural setup will also help in determination of applicability scope. Our operational definition of grit as a unidimensional variable also comes close to some researchers who suggest that aspects of this concept such as perseverance and consistency be distinguished, since it would be interesting to find out how autonomy support predicts the two dimensions

differently. Finally, we have tried SOC as a mediator, which also can be a moderator or interact with other variables (e.g. basic needs satisfaction, psychological control).

On the basis of our results, a number of ideas is likely to assist in future research. The priority research design would be longitudinal, following adolescents over time to ascertain how early PAS may impact SOC and grit as they grow to adulthood and whether these pathways are predictive of the future e.g., academic achievement and well-being. Similarly to the recommendation given by Du et al. (2023), further studies with a longer-term design could corroborate whether the positive impact of autonomy support on grit is long-lasting. A larger group that transcends culture and covers more ground would also be useful since the family structure and the interpretation of autonomy varies across the world. Such an example is examining whether the PAS, SOC and grit model is generalizable to collectivist or individualist cultures, or to one-parent families.

## **5.5 Conclusion**

Perceived parental autonomy support predicts adolescents' grit both directly and indirectly through an enhanced sense of coherence. Mother predicts more sense of coherence and Father predicts more grit. Gender difference is non significant. Practically, promoting autonomy-supportive parenting and interventions that strengthen adolescents' comprehensibility, manageability, and meaningfulness can foster perseverance and resilience. Findings are preliminary given the cross-sectional, self-report design and limited sample generalizability; longitudinal or experimental studies are needed to confirm causality.

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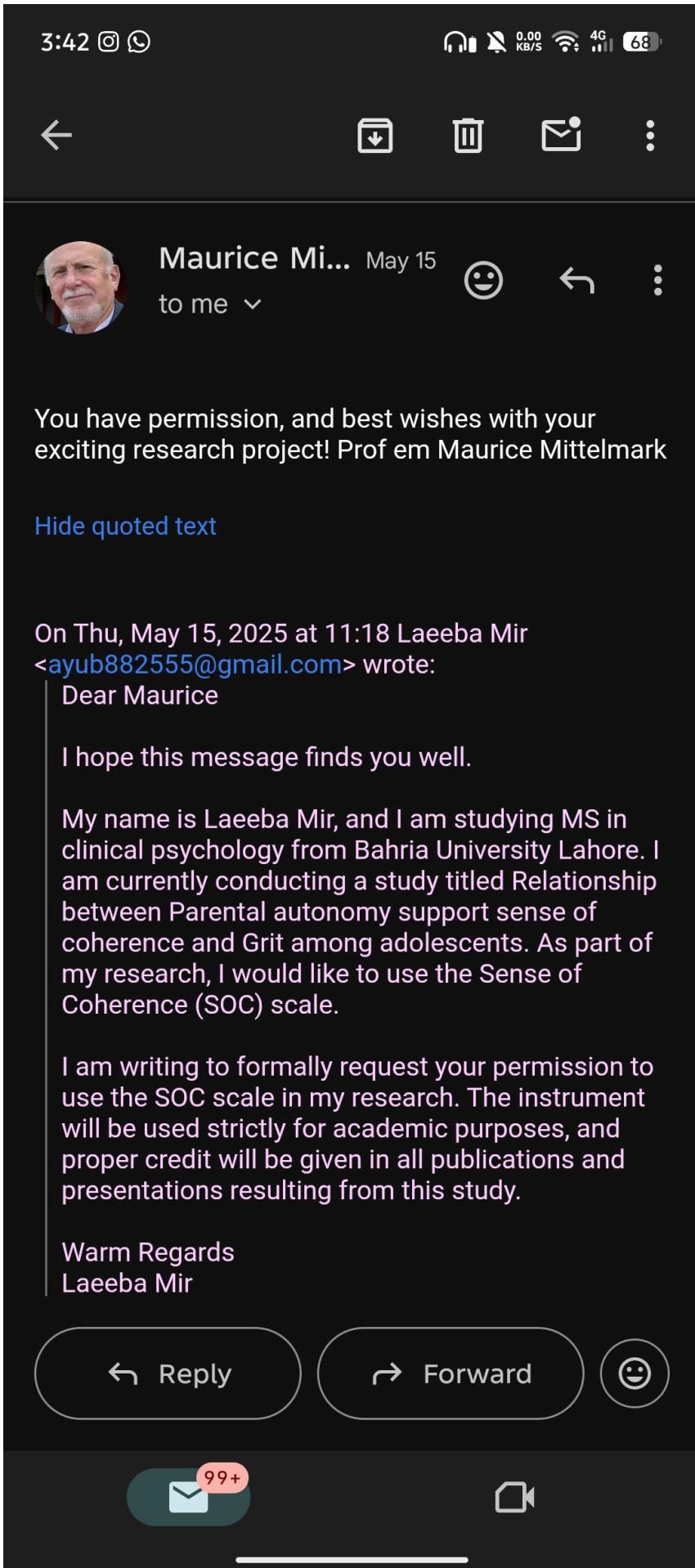
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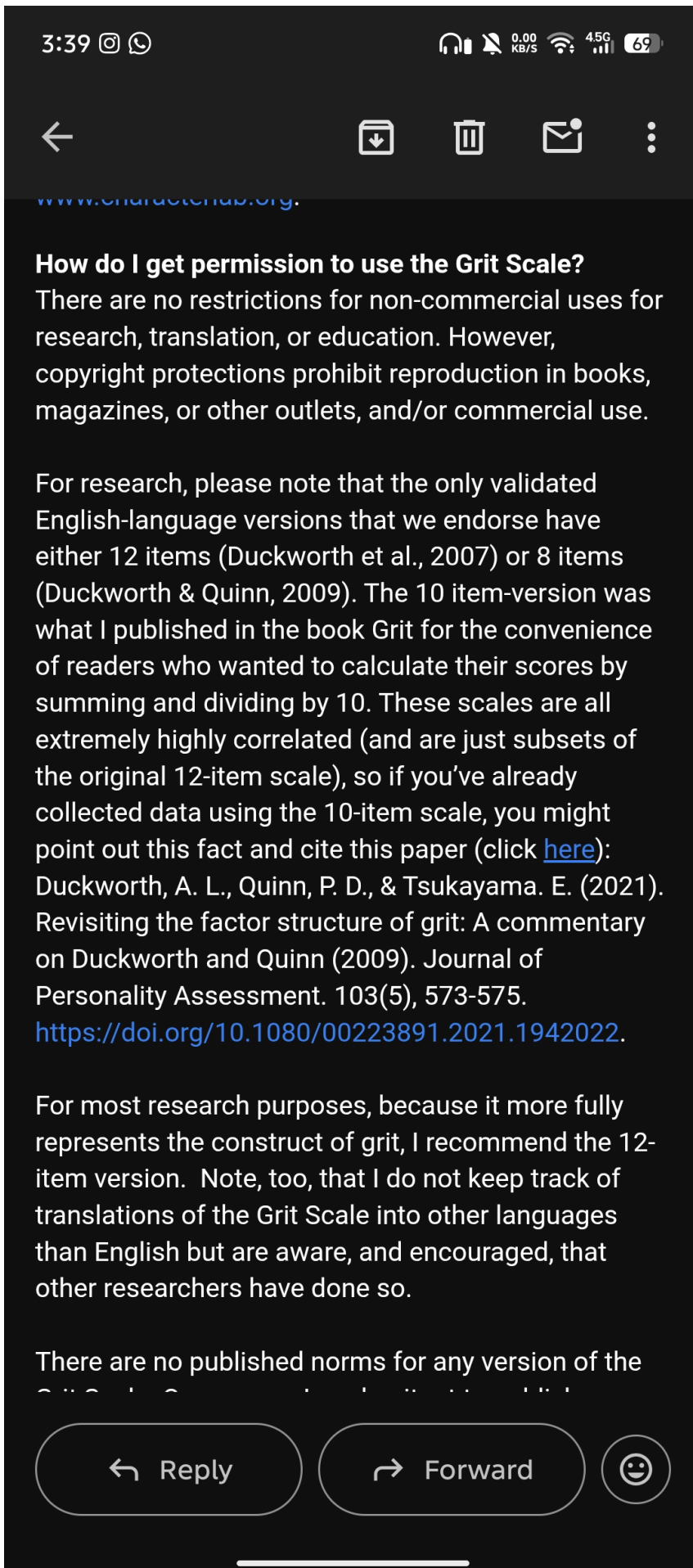
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# Perceived Parental Autonomy Support Scale (P-PASS) Terms & Conditions

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Please select the appropriate answer for your situation \*

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I *previously* agreed to the terms and conditions and do not need a commercial license.

## Questionnaires

### Main Questionnaire

Email \*



196 KB

### Perceived Parental Autonomy Support Scale (P-PASS)

I'm not a robot

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## Translations

Submit



194 KB

### The Perceived Parental Autonomy Support Scale (P-PASS) - French

\* Required field

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BULC/PSY/2025/202

**Bahria University**  
Discovering Knowledge23<sup>rd</sup> May 2025**Permission Letter****Subject: Request for Cooperation for Collecting Research Data****To Whom It May Concern****Respected Sir/Ma'am,**

Bahria University is a Federally Chartered Public Sector University. Bahria University was established by the Pakistan Navy in 2000. Since then, it has steadily grown into one of Pakistan's leading higher education institutions with campuses in Islamabad, Karachi, and Lahore.

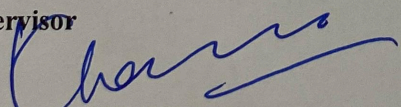
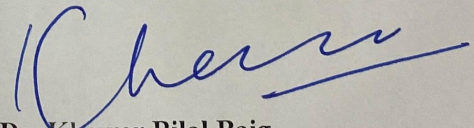
The Department of Professional Psychology (DPP) was established in 2018. The Department offers both BS Psychology and MS Clinical Psychology Programs, aims to give quality education, and promotes ethical and competent psychology practice in Pakistan.

*Ms. Laeeba Mir, a student* of Bahria University Lahore Campus, currently enrolled in MS Clinical Psychology, IV Semester. She is conducting final year research entitled "*Parental Autonomy Support, Sense of Coherence and Grit among Adolescents*"

For this purpose, she needs to collect data from your institute/organization. The information provided will remain confidential, and we will ensure the ethical responsibility of all our participants. The results concluded from the collected data will be used only for educational purposes. The identity of any participant will not be disclosed at any time.

We would like to seek your cooperation in conducting this research. Your assistance in our scientific pursuit will be highly appreciated and acknowledged.

Thanking you in anticipation.

**Supervisor**  
**Dr. Khawer Bilal Baig**  
Sr. Associate Professor  
**Dr. Khawer Bilal Baig****Senior Associate Professor/Head of the Department**  
Department of Professional Psychology  
Bahria University Lahore Campus

### Consent Form

I am **Laeeba Mir**, student of **MS Clinical Psychology** from Bahria University, Lahore. I am conducting research on “**Relationship between Parental autonomy support, Sense of Coherence and Grit among adolescent’s**” under supervision of Dr. Khawer Bilal Baig. The purpose of this study is to explore the Relationship between Parental autonomy support, Sense of Coherence and Grit among adolescent’s Understanding these associations will provide insights into how parenting practices can shape adolescents’ mental and emotional resilience, offering valuable information for parents, educators, and mental health professionals working with this age group.

The Questionnaire will take 10-15 minutes. It is to assure, that all the information taken from you will be kept confidential and will only be used for research purpose. Your participation is voluntary and you have the right to withdraw from this study at any point.

If you agree to participate, then kindly sign the form.

.....

For queries feel free to contact Researcher Laeeba Mir:

Supervisor: Dr. Khawer Bilal Baig, Email. [drkhawerbilal@gmail.com](mailto:drkhawerbilal@gmail.com)

## Demographic Information Sheet

Name: .....

Age: 13-15  16-18

Gender: Male  Female

Grade/Academic Level: Middle  Matric  Intermediate

Type of School: Government  Private  Semi government

Area of Residence: Urban  Rural

Family System: Nuclear  Joint

Family Structure: Both Parent  Single Parent  Guardian

Mother's Education: No formal education  Primary  Secondary

Intermediate  Graduate  Postgraduate

### Father's Education:

No formal education  Primary  Secondary  Intermediate

Graduate  Postgraduate

Monthly Family Income:.....

Number of Siblings:.....

### Birth Order:

First-born  Middle  Last-born  Only child

### Who do you turn to when you need help and support?

Both parents  Mother  Father  Friends

### What kind of help you have received the most?

Financial help  Emotional help  Educational help  Guidance

### What do you think is the most helpful support for you?

Financial help  Emotional help  Educational help  Guidance

**If you don't get support from your parents then whom do you get it from?**

1. Seek help from someone else
2. Try to handle it on your own
3. Feel overwhelmed or stressed
4. Other (Please specify.....)

**How confident are you in your ability to cope with daily stresses?**

Not confident       Confident

## YOUR PERCEPTION OF YOUR PARENTS

Please answer the following questions about your mother and father while you were growing up. If you did not have any contact with one of your parents (for example, your father), but another parent of the same sex lived with you (for example, your stepfather), please answer the questions about this other adult.

*If you did not have any contact with one of your parents, and no other adult of the same sex lived with you, please leave the questions about this parent blank.*

Using the scale bellow, please indicate the extent to which you agree with each of the statements regarding your mother and father's behaviors.

<b>Do not agree at all</b> 1	<b>Hardly agree</b> 2	<b>Slightly agree</b> 3	<b>Somewhat agree</b> 4	<b>agree</b> 5	<b>Strongly agree</b> 6	<b>Very strongly agree</b> 7
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**BE CAREFUL, the order of responses for your mother and father changes for each item.**

### WHEN I WAS GROWING UP ...

1. My parents gave me many opportunities to make my own decisions about what I was doing.	<b>Mother</b>	1	2	3	4	5	6	7
	<i>Father*</i>	1	2	3	4	5	6	7
2. When my parents asked me to do something, they explained why they wanted me to do it.	<i>Father*</i>	1	2	3	4	5	6	7
	<b>Mother</b>	1	2	3	4	5	6	7
3. When I refused to do something, my parents threatened to take away certain privileges in order to make me do it.	<b>Mother</b>	1	2	3	4	5	6	7
	<i>Father*</i>	1	2	3	4	5	6	7
4. My point of view was very important to my parents when they made important decisions concerning me.	<i>Father*</i>	1	2	3	4	5	6	7
	<b>Mother</b>	1	2	3	4	5	6	7
5. My parents refused to accept that I could want simply to have fun without trying to be the best.	<b>Mother</b>	1	2	3	4	5	6	7
	<i>Father*</i>	1	2	3	4	5	6	7
6. When my parents wanted me to do something differently, they made me feel guilty.	<i>Father*</i>	1	2	3	4	5	6	7
	<b>Mother</b>	1	2	3	4	5	6	7
7. My parents encouraged me to be myself.	<b>Mother</b>	1	2	3	4	5	6	7
	<i>Father*</i>	1	2	3	4	5	6	7
8. Within certain limits, my parents allowed me the freedom to choose my own activities.	<i>Father*</i>	1	2	3	4	5	6	7
	<b>Mother</b>	1	2	3	4	5	6	7
9. When I was not allowed to do something, I usually knew why.	<b>Mother</b>	1	2	3	4	5	6	7
	<i>Father*</i>	1	2	3	4	5	6	7
10. I always had to do what my parents wanted me to do, if not, they would threaten to take away privileges.	<i>Father*</i>	1	2	3	4	5	6	7
	<b>Mother</b>	1	2	3	4	5	6	7
11. My parents believed that, in order to succeed, I always had to be the best at what I did.	<b>Mother</b>	1	2	3	4	5	6	7
	<i>Father*</i>	1	2	3	4	5	6	7
12. My parents made me feel guilty for anything and everything.	<i>Father*</i>	1	2	3	4	5	6	7
	<b>Mother</b>	1	2	3	4	5	6	7
13. My parents were able to put themselves in my shoes and understand my feelings.	<b>Mother</b>	1	2	3	4	5	6	7
	<i>Father*</i>	1	2	3	4	5	6	7

14. My parents hoped that I would make choices that corresponded to my interests and preferences regardless of what theirs were.	<i>Father*</i> 1 2 3 4 5 6 7 <b>Mother</b> 1 2 3 4 5 6 7
15. When my parents wanted me to do something, I had to obey or else I was punished.	<b>Mother</b> 1 2 3 4 5 6 7 <i>Father*</i> 1 2 3 4 5 6 7
16. My parents were open to my thoughts and feelings even when they were different from theirs.	<i>Father*</i> 1 2 3 4 5 6 7 <b>Mother</b> 1 2 3 4 5 6 7
17. In order for my parents to be proud of me, I had to be the best.	<b>Mother</b> 1 2 3 4 5 6 7 <i>Father*</i> 1 2 3 4 5 6 7
18. When my parents wanted me to act differently, they made me feel ashamed in order to make me change.	<i>Father*</i> 1 2 3 4 5 6 7 <b>Mother</b> 1 2 3 4 5 6 7
19. My parents made sure that I understood why they forbid certain things.	<b>Mother</b> 1 2 3 4 5 6 7 <i>Father*</i> 1 2 3 4 5 6 7
20. As soon as I didn't do exactly what my parents wanted, they threatened to punish me.	<i>Father*</i> 1 2 3 4 5 6 7 <b>Mother</b> 1 2 3 4 5 6 7
21. My parents used guilt to control me.	<b>Mother</b> 1 2 3 4 5 6 7 <i>Father*</i> 1 2 3 4 5 6 7
22. My parents insisted that I always be better than others.	<i>Father*</i> 1 2 3 4 5 6 7 <b>Mother</b> 1 2 3 4 5 6 7
23. When I asked why I had to do, or not do, something, my parents gave me good reasons.	<b>Mother</b> 1 2 3 4 5 6 7 <i>Father*</i> 1 2 3 4 5 6 7
24. My parents listened to my opinion and point of view when I disagreed with them.	<i>Father*</i> 1 2 3 4 5 6 7 <b>Mother</b> 1 2 3 4 5 6 7

1.	When you talk to people, do you have the feeling they don't understand you?	never have this feeling	2	3	4	5	6	always have this feeling
2	In the past, when you had to do something which depended upon <a href="#">cooperation</a> with others, did you have the feeling that it	surely wouldn't get done	2	3	4	5	6	surely would get done
3	Think of the people with whom you come into contact daily, aside from the ones to whom you feel closest. How well do you know most of them?	you feel that they're strangers	2	3	4	5	6	you know them very well
4	Do you have the feeling that you don't really care what goes on around you?	very seldom or never	2	3	4	5	6	very often
5	Has it happened in the past that you were surprised by the behavior of people whom you thought you knew well?	never happened	2	3	4	5	6	always happened
6	Has it happened that people whom you counted on disappointed you?	never happened	2	3	4	5	6	always happened
7	Life is	full of interest	2	3	4	5	6	just routine
8	Until now your life has had	no clear goals or purpose at all	2	3	4	5	6	very clear goals and purpose
9	Do you have the feeling that you're being treated unfairly?	very often	2	3	4	5	6	very seldom or never
10	In the past 10 years your life has been	full of changes without knowing what will happen next	2	3	4	5	6	completely consistent and clear
11	Most of the things you do in the future will probably be	completely fascinating	2	3	4	5	6	deadly boring
12	Do you have the feeling that you're in an unfamiliar situation and don't know what to do?	very often	2	3	4	5	6	very seldom or never
13	What best describes how you see life?	one can always find a solution to painful things in life	2	3	4	5	6	there is no solution to painful things in life
14	When you think about your life, you very often	feel good to be alive	2	3	4	5	6	ask yourself why you exist at all
15	When you face a difficult problem, the choice of a solution is:	always confusing and hard to find	2	3	4	5	6	always completely clear

16	Doing the things you do every day is	a source of deep pleasure and satisfaction	2	3	4	5	6	a source of pain and <a href="#">boredom</a>
17	Your life in the future will probably be:	full of changes without knowing what	2	3	4	5	6	will happen next completely consistent and clear
18	When something unpleasant happened in the past your tendency was	to eat yourself up” about it	2	3	4	5	6	to say “ok, that’s that, I have to live with it” and go on
19	Do you have very mixed-up feelings and ideas	very seldom or never	2	3	4	5	6	very often
20	When you do something that gives you a good feeling	it’s certain that you’ll go on <a href="#">feeling good</a>	2	3	4	5	6	it’s certain that something will spoil the feeling
21	Does it happen that you have feelings inside you would rather not feel?	very often	2	3	4	5	6	very seldom or never
22	You anticipate that your personal life in the future will be	totally without meaning or purpose	2	3	4	5	6	full meaning and purpose
23	Do you think that there will always be people whom you can count on in the future?	you’re certain there’ll be	2	3	4	5	6	you doubt there’ll be
24	Does it happen that you have the feeling that you don’t know exactly what’s about to happen?	very often	2	3	4	5	6	very seldom or neve
25	Many people—even those with a strong character—sometimes feel like sad sacks (losers) in certain situations. How often have you felt this way in the past?	never	2	3	4	5	6	very often
26	When something happened, you have generally found that:	you overestimated or underestimated its importance	2	3	4	5	6	you saw things in the right proportion
27	When you think of difficulties you are likely to face in important aspects of your life, do you have the feeling that	you will always succeed in overcoming the difficulties	2	3	4	5	6	you won’t succeed in overcoming the difficulties

28	How often do you have the feeling that there's little meaning in the things you do in your daily life?	very often	2	3	4	5	6	very seldom or never
29	How often do you have feelings that you're not sure you can keep under control?	very often	2	3	4	5	6	very seldom or never

## 12- Item Grit Scale

*Directions for taking the Grit Scale: Please respond to the following 12 items. Be honest – there are no right or wrong answers!*

1. I have overcome setbacks to conquer an important challenge.
  - Very much like me
  - Mostly like me
  - Somewhat like me
  - Not much like me
  - Not like me at all
  
2. New ideas and projects sometimes distract me from previous ones.\*
  - Very much like me
  - Mostly like me
  - Somewhat like me
  - Not much like me
  - Not like me at all
  
3. My interests change from year to year.\*
  - Very much like me
  - Mostly like me
  - Somewhat like me
  - Not much like me
  - Not like me at all
  
4. Setbacks don't discourage me.
  - Very much like me
  - Mostly like me
  - Somewhat like me
  - Not much like me
  - Not like me at all
  
5. I have been obsessed with a certain idea or project for a short time but later lost interest.\*
  - Very much like me
  - Mostly like me
  - Somewhat like me
  - Not much like me
  - Not like me at all
  
6. I am a hard worker.
  - Very much like me
  - Mostly like me
  - Somewhat like me
  - Not much like me
  - Not like me at all

7. I often set a goal but later choose to pursue a different one.\*

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

8. I have difficulty maintaining my focus on projects that take more than a few months to complete.\*

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

9. I finish whatever I begin.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

10. I have achieved a goal that took years of work.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

11. I become interested in new pursuits every few months.\*

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

12. I am diligent.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all