

Parental Involvement & Parental Anxiety

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Master's Thesis

Spring/Summer 2020

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Abstract

This study aimed at examining the potential relations of parental involvement onto parents, namely the procurement of parent anxiety. A middle school in an area of middle to low socio-economic level was approached to conduct the survey and a hundred and fifteen ($N = 115$) participants completed questionnaires regarding their levels of parental anxiety and parental involvement, measured here as an average of five (5) other sub-variables and their involvement with their children's academic life respectively. The study produced no statistically or otherwise significant results, nor did gender seemed to be a predictor for either of the variables. Additional tests were conducted to check on potential correlations or effects between the sub-variables that were measured as part of assessing parental anxiety levels and namely health and marital problems, social exclusion, parental limitation and general everyday freedom of action of the parent. These were also probed versus gender, and parental involvement. It is concluded that while reliable and often used in literature, the questionnaires were not quite right for this research question and that different types of cultures, parenting styles, as well as children create a difficult mix of variables to study or are not related at all as the findings suggest.

Keywords: parental involvement, parental anxiety

Parental Involvement & Parental Anxiety

“Parenting... the most complicated job in the world” (Virginia, 1972). Parental involvement is a broad term, even for psychologists (Bouffard & Weiss, 2008), and generally defined as “all activities that are linked to learning”. For the purposes of this piece of research, parental involvement is condensed in activities parents undertake for the academic success of their children. That is, their ways of involving themselves in the school activities of their children and during the children’s schooling ages (Hill & Tyson, 2009).

A specific issue that arises with this definition of parental involvement is that sociologists and others of the humanities nowadays generally define parental involvement from the school’s perspective (Avvisati, Besbas, & Guyon, 2010), as in how much or when do parents come in for school activities. This does not work here, because the main interest of this study was to examine the efforts the parents are delivering towards the children’s schooling from their own perspective, how it affects them and how potentially it produces negative results for them in varying levels of anxiety. Identifying the aspects of it in literature, its very nature and how it is perceived by various fields, but mainly psychology is key. Other fields’ views are important and valuable as well due to the insight they may provide us with. For example, an economist would define parental involvement as simple, direct effort, strictly aimed on bettering the academic results of a child (Avvisati et al., 2010). Even for psychologists though, that definition does not sound wrong. Missing some aspects, perhaps, but not wrong.

In an effort to match previous literature for this study, other attempts at defining parental involvement have been drawn upon and historically have also been made in the field (Green, Walker, Hoover-Dempsey, & Sandler, 2007). As just mentioned, traditional definitions are from the school’s own perspective (Green et al., 2007), meaning and limiting the involvement of the

parents in school based activities (Deslandes & Bertrand, 2004), while sociologists at the same time have distinguished between home-based activities (like the classic helping one's own children with homework) and school-based ones (like attending the teachers' briefings on the students' performance) (Suichu & Willms, 1996). Ultimately though, what is always apparent and the prime core in defining parental involvement is the desire of the parents to see their children improve, a shared value that characterises most parental and school efforts.

Society at large has been interested in the alleged positive effect parental involvement can have on students' academic achievements (Fan & Chen, 2001a). The interest has been great over the last decades, so great in fact, that many people in the thick of education, such as directors of state-wide policy (Prindle & Rasinski, 1989; Van Meter, 1994; Wagner & Sconyers, 1996), administrators of schools (Fan, 2001; Green et al., 2007; Khan, 1996; Roach, 1994; Wanat, 1994), institutions' teachers (Allen, 1996; Clarke & Williams, 1992; Matzye, 1995), a considerable number of parents (Dye, 1989; Teleki & Buck-Gomez, 2002), and some students (Brian, 1994; Choi, Bempechat, & Ginsburg, 1994) have come to a consensus that stated involvement is deemed crucial in the academic successes of their children (Deford, 1996; Edwards, 1995; Mundschenk & Foley, 1994; Ryan, 1992). A considerable amount of studies have been conducted with varying and mixed results, ranging from finding a strong relationship between involvement and academic student success (Christenson, Rounds, & Gorney, 1992; Epstein, 1991; Singh et al., 1995) and some others reporting even none in some cases (Bobbett, 1995; Ford, 1989; Keith, Reimers, Fehrmann, Pottebaum, & Aubey, 1986; Natriello & McDill, 1986).

In addition, and while in everyday academic speech we may use the term of parental involvement and intuitively understand what one's discussion partner may be referring to, the

term has not been practically and properly defined in literature, hopping between definitions such as the aspiration the parents have for their children's future (Bloom, 1980), as communication between teachers and parents about the children (Epstein, 1991), as communication between parent and child about school (Christenson et al., 1992), as discipline imposed via the rules concerning studying at home (Marjoribanks, 1983) or finally as the participation of parents in their children's school activities (Stevenson & Baker, 1987). It would not then be unfounded to assume that the confusion and the pre-mentioned mixed results in the literature's drawn conclusions could be a natural occurring causality of the sheer chaos surrounding the general term of parental involvement and the inability of the research done on the topic to draw specific ones about it. Add to that its relationship to other concepts and psychological effects on both parties involved, and how different researchers define and work individually with parental involvement and the variety of definitions and concepts of them, propels one to seek their own definition of it, forcing a researcher to ignore some, and highlight other parts of the research on the topic.

Theoretical Framework

Bronfenbrenner's Ecological Systems Theory

There are five major complex layers that make up a child's ecosystem (Paquette & Ryan, 2000; Seginer, 2006). While every single one of them plays a major role in a child's development and their importance cannot be understated, what this study aimed at further examining was the microsystem layer in a unique way.

This layer's name, the microsystem, is given because of the nature of the layer itself. It contains the structures that are comprised by the people closest to the child and that impact him or her directly. These people are his or her school, neighbourhood, family, or childcare services that concern the child's life. The other layers, in short, deal with the connections between the

structures of a child's microsystem (mesosystem), the bigger scale social system(s) that the child may be functioning in, alas not directly, like the parents' workplace hours (exosystem), the culture, societal and religious values, laws and customs (macrosystem) and phenomena that will inevitably occur or not in a child's life, like the changes of his or her body or the death of a loved one while growing up (chronosystem) (Berk, 2000).

An easy thing to miss in the first layer, something that does not generally characterise or is at least frequently met with the rest of them, is that relationships at this very first level cause impact not in one but rather two directions: both for and towards the child, as well as from the child. On their turn, these "bi-directional influences" (Paquette & Ryan, 2000) produce waves that shape the other layers (Seginer, 2006) and this theory's key point consists in exactly these interactions and their cross-layered effects. At this very first level, these interactions are found to be at their strongest.

The attempt of this study was to shed some light on exactly how the interaction from parent to child on this level, based only on something that the caring parent will do, in that he or she will be involved with the child's upbringing, may cause anxiety for the parent. This is an important issue, since if parental involvement by itself would cause anxiety for the parent, then a vicious cycle could be formed that would endanger the psychological ecosystem of the child. The parent fulfilling his or her duty is getting anxious and then causing anxiety for the child along with other problems as numerous studies have already shown (Capps, Sigman, Sena, Heoker, & Whalen, 1996; McClure, Brennan, Hammen, & Le Brocque, 2001; Williams et al., 2003). The potential existence of such a cycle could potentially be prevented, if it were to exist, by counselling and therapy for the parents that could be overzealous in their endeavour to assist with their child's academic or other growth.

Parental Anxiety & Attentional Control Theory

The main reason for as to why this study looked into parental anxiety originating, at least partly, from parental involvement was the fact that, and as just mentioned, parental anxiety seems to have consequences on the children's academic performance (McClure et al., 2001). The same study finds that no matter the gender of the child, maternal anxiety significantly predicted anxiety in children. When accounting the fact that traditionally, mothers take more time to help their children with homework and are generally more involved in their children's education process (Weiss et al., 2003), this is a cause for concern; if a mother would be building anxiety by being involved and potentially disappointed by the academic results of her child, meaning parental involvement would cause parental anxiety, then the family could be locked in a vicious cycle that would accentuate these effects further. Another cause for concern lies in the limited amount of literature devoted in looking into the fathers' potential predictors of anxiety, despite the frequently evidenced effect the involved ones have in producing straight As in school for their child via their involvement (Winqvist, Westat, & West, 2001).

Previous studies have only assessed the effects of parental involvement on children and *for* children (Avvisati et al., 2010). There is a lack of knowledge in the literature on what happens to the parents that are involved. There is one relevant study that looked at parental anxiety for the quality of life of the children as the aim, but also included that low quality of life for their children, greatly diminished the quality of life of their parents, in turn (Williams et al., 2003), leading to an unrelenting cycle of diminishing quality of life for both parties. What this specific study shows is an undervalued and overlooked aspect of the life parent and child share. With the just mentioned conclusion of the vicious cycle of the study, it is glaring for as to why studies affecting the psychological well-being of parents and the effects their involvement may

have on themselves, have not been conducted. Not only for the parents, but for the children that have them, as the parents' quality of life and well-being, obviously affects their children's (Williams et al., 2003).

The main issue with parental anxiety lies in the effects predicted by the attentional control theory (Eysenck, Derakshan, Santos, & Calvo, 2007). This theory is an evolution of the processing efficiency theory that between others and in short, displayed that working memory is hindered by anxiety (Wilson, Smith, & Holmes, 2007). The extension of this just mentioned theory holds that one's attentional control, as in the ability of a person to focus on what is important is hindered by anxiety. Specifically, the theory explains that the parent's (for this study's case) functioning of the system that sets out his or her goals is disturbed in such a way that the conscious control of attention is surrendered to the purely stimulus-driven attentional system of the brain. Additionally, the parent would pay much more attention to dangerous stimuli and his or her attention would be diverted there (Eysenck et al., 2007). While a protective parent is a good thing for the safety of one's child, this theory probes one to think. In a hypothesised scenario of a cycle where anxiety is bounced back and forth between parent and child there is a situation where the child's academic and psychological performance and psychological well-being deteriorate. Alerting is also the fact that this deterioration worsens without a chance for a solution, unless counselling, therapy, or both, interfere. At the same time, and with a parent focused almost exclusively on the danger-oozing stimuli around him or her, they may fail to respond to their other parental duties, spiralling into more anxiety caused by their perceived failure to deliver as parental duty commands. This scenario is not a far-flung one.

It isn't much about what you *do* as a parent; It's who you are

Parents do not randomly choose their level of parental involvement and schools and other institutions do not randomly select parents to participate in certain parental activities that have to do with the children's schooling (Avvisati et al., 2010). This ultimately means that children's academic output and the activities undertaken by their parents need not be causal at all (Green et al., 2007). Consequently, parents and their feelings about their engagement are not random, as per the famous saying "It isn't much about what you *do* as a parent; It's who you are" (Levine, 2006). This is highlighted in the extra 4.5 extra hours highly educated mothers spend for their children's homework in contrast to mothers that are not as highly educated (Guryan, Hurst, & Kearney, 2008). This well-observed relationship holds true across both genders and through all educational levels, even for travelling to assist students. It is striking when it is also observed with parents that are out of the home often, as a busy well-educated parent with a demanding job.

The reason for this is that what parents do for their children and consequently how much and in what way they are being involved in their children's education and general schooling is mostly a matter of who they are as people and their background (Avvisati et al., 2010). This is showcased when parental background is factored in the regression analysis and most of the correlation in the relationship between children's academic achievement and their parents' involvement disappears (Bracke & Corts, 2012), creating a big gap in the field's knowledge on the aforementioned causal relationship, yet parents are reportedly increasing the time they spent with their children (Guryan et al., 2008).

Socio-Economic Parental Situation

The better the financial situation of a parent, the more time he or she will devote to a child from an economic point of view in addition to all the other aspects that parenting puts a

man or a woman that has a child in. This has taken the literature by surprise (Guryan et al., 2008), since the higher opportunity cost, the higher the financial potential outcome. This view is important and relevant because one assumption of this study was based on parental involvement being an anxiety source for parents, either in a micro way, as in everyday anxiety, or macro, as in worry and anxiety about a child's future prospects based on the assumptions of the parent about its future when faced with their academic performance grading. It was anecdotally hypothesised that since highly educated and better well-off parents are ignoring the opportunity cost of spending more time with their children, the higher their status, they would also be ignoring the pitfall of a potential anxiety source in their life, caused by their ever-increasing involvement in their children's education. This seemed to be a well-based hypothesis to make, since as involvement increases, time, effort and resources allocated to leisure activities for parents and their children are sharply reduced (Krueger et al., 2009) and the potential disappointment for their investment in their child being for not becomes grandiose.

It is important here to reiterate on how parental involvement and its effects are generally measured in the literature and that is almost purely by academic result (Avvisati et al., 2010). Consequently, another base for the afore-mentioned hypothesis was that parents partially decide on their level of involvement based on the intergenerational mechanism that characterises their involvement with children. In other words, being involved with one's children helps in breaching the generational gap between the two (Patacchini & Zenou, 2011), leading to better understanding between the two parties (parents & children) that ultimately fosters trust and a better environment (Winqvist et al., 2001).

The literature concludes that there are eight (8) specific characteristics that make good parenting (Sanders & Matthew, 2008) and these in short are parent-child relationship skills (such

as time spent), encouraging positive behaviour, teaching it, managing misbehaviour, anticipating it and planning ahead, putting emphasis on self-regulation, being skilled in dealing with the child's mood and being able to cope oneself and finally communicating with one's partner. Above all skills though, consistency is the key (Sanders & Matthew, 2008). Evidently, parents think differently about what is better or best for their children and that is easily showcased in studies that inspect different cultures on their parenting (Day, 2013). This issue is brought up exactly because, as previously showcased, the quality of life for parent and child are intertwined. If at least a certain level of parental involvement seemed to be causing anxiety for the parents, then future therapy for them could be adjusted to help them in the most complicated job in the world.

Parental Involvement's Literature Problem

Current literature does not seem to have a solid base for arriving at such a conclusion and that realisation becomes striking when one considers that it is scarce on the exact effects hours invested by parents have on their children's performances (Avvisati et al., 2010). Parental involvement is a nebulous topic, with its effects being not only hard to measure, but rather almost downright impossible to due to the very physical requirements of such a study taking place. To illustrate this point, briefly introduced below are the two most used approaches in the literature for measuring returns of investment and other inputs into education (Todd & Wolpin, 2003).

The first consists of simple data obtained during observation while preferring samples that represent the nationalities found in the country. The reason for as to why this is the case, lies in the assumption that the production function in question and under scrutiny by the research piece is generally and almost always linear and concerning both the inputs observed and also the

potential unobservable endowments of the sample (Todd & Wolpin, 2007). The result is the simplification of the research process by the assumption, but with that said, the precise estimation of the potential returns is still rather challenging (Avvisati et al., 2010). The second approach emphasises and combines the two effects of an input (in our case parental involvement), namely the direct and the indirect one, in a reduced form parameter. In this, the researcher can tell and find the looked-for effect using experimental data or by organising natural experiments, pointing to hard to derive conclusions from social and other contexts. Even when accounting for all approaches though, there is a striking lack of data that include both the identification of the components that make parental involvement and the outputs that would showcase its effects (Avvisati et al., 2010).

All of this makes it apparent that measuring the effect of parental involvement is generally hard and the opportunities limited, since, and as showcased by the two approaches above, a study that would for example take its measurements simultaneously for both input and output would be largely impossible in this subject. In other words, being able to estimate or measure the effect of parental involvement in a clearly defined production function that concerns itself with education, using instruments that would provide a researcher with variables that could be used in a statistical analysis, seems to be largely limited.

Different Types of Parental Involvement

Parents view the nature of their involvement differently with some limiting it to help at home or the connection between home and school and others feeling a sense and the carrying out of duty for everything that they do (Kim, An, Kim, & Kim, 2018). This illustrates the point made previously in that the classic definition of parental involvement in how the school views or measures it falls short when asking the parents on their views about the subject.

Not only is the nature of the parental involvement different though, the path that parents choose for the children seems to play an important role in their general development. Namely, parents that support their children in growing emotionally and psychologically well, seem to not support them in academic successes and the more they emotionally support them, the less child-school connection is observed (Kim et al., 2018).

Different Types of Parental Motivation & the Internal Working Model of Caregiving

The internal working model of caregiving, a collection of experiences as a parent, perceptions about the self (parent) and one's child is the foundation on which emotion allows one to play the role of a parent (McKechnie, Pridham, & Tluczek, 2016). The study was informed by the theories surrounding the aforementioned model and its multiple versions that have formed as a result of mainly qualitative research (McKechnie & Pridham, 2012; K. Pridham, Harrison, McKechnie, & Brown, 2017) that have through the latest decades arrived at the conclusion that the emotional organisation the parent creates after the birth of his or her child is the core of the caregiving and all of its theoretical models (Bretherton, 1992; Dykas & Cassidy, 2011; George & Solomon, 2016; Morawska, 2009). It is an emotionally shifting and dynamically changing psychological environment in which the parent assesses constantly his or her motivations for providing their caregiving. These motivations can of course differ from one parent to the next, supporting and explaining in part why what a parent is, is more important than what they do, as these motivations are always reflected on the parents' intrinsic and conscious pursuits they might set for themselves as a parent, but for their child as well, intentions for their child's future, as well as expectations (McKechnie et al., 2016). It is then glaring to realise that research on the timeframe before and after birth, the time during which these motivations and

model of caring are formed (George & Solomon, 2016; McKechnie & Pridham, 2012; Pridham et al., 2012), research is severely lacking.

This does not mean that these motivations do not keep evolving and generally growing as the parent and the child keep aging (George & Solomon, 1998, 2012; K. Pridham et al., 2012). Other studies (McKechnie & Pridham, 2012; Pridham et al., 2005, 2012, 2017; Pridham, Lin, & Brown, 2001; Pridham, Berger Knight, & Stephenson, 1989) lead us to believe that generally healthy infants are benefitted from maternal motivations that seem to be greater while the mother is transitioning between non-parenthood and parenthood and that happens following the just started and then full infancy of the child. Mothers reporting that they were doing fine, as in being rather flexible with their time-schedule and more satisfied with their performance overall, indeed seemed to be doing well raising and attending to their child's needs (Pridham, Schroeder, & Brown, 1999). What is most important from that study and for this study's purpose is the included in the cited one's conclusion, that parental distress or anxiety could play a damaging role to the parent's raw ability and general awareness when needed to respond to changes presenting themselves in the child's needs on the issue of caregiving.

Different Types of Children & Parents

Adding to this, differently cultured children benefit differently from parental involvement and uniquely, Asian-American children seem to benefit the least from it (Jeynes, 2003) and according to the same study, the same parents can literally be defined as clearly actively involved or clearly uninvolved simply depending on the measures that are used to pinpoint what parental involvement is. When measured by parental school attendance, they can be the least involved (Griffith, 1998) and when measured via their contributions at home, they can be the most active (Griffith, 1998; Huntsinger & Jose, 2009; Schneider & Lee, 1990). Other pieces of research on

the other hand, measure parental involvement very differently, creating variables and basing it on concepts such as the level of communication between parents and between parents and children, the level of will that drives the aspiration of a parent to play the role of one or even how autonomous they allow their children to be (Kurt & Taş, 2018). The last measure on such a recent study directly contradicts with what was discussed earlier about the amount of time parents spend together with their children when actively involved in their school duties.

Literature does not have evidence or continuous and strong support for parental involvement affecting the academic achievement of children (Fan, 2001; Green et al., 2007; Hill & Tyson, 2009). At the very least it is only beneficial when concerning specific groups of people and on top of that, many factors also hinder or help the effectiveness of its potential benefits, such as how the parent is being involved (helping the child be more autonomous versus simply interfering), what grade and how old the child is (e.g. elementary vs high school), how achievement oriented the child is and what type of class the parent is assisting with (Gonida & Cortina, 2014).

The different ways a parent involves him or herself, driven by his or her motivation, is in insisting in the child attaining mastery, a method that generally helps (Gonida & Cortina, 2014), versus social comparisons for instance which do not (Friedel, Cortina, Turner, & Midgley, 2007). These are mentioned to showcase a specific issue. Those two methods of parents are both considered parental involvement. When parents are asked if they are involved, they honestly answer that they are involved, even if their involvement does not, according to research, help their child. In addition, different ethnic groups, benefit and react differently to different types of involvement and the beliefs that the parents hold for their children also plays an important role on children motivation, academic achievement and behaviour (Eccles, 2007).

What all of this holds at its chest is a nebulous, still not identified, term in parental involvement, parents that do not know what they are doing, why they are doing it, how they should be doing it and when. Children that as children cannot do much about all of this and producing results that can be inferred from the literature to have no to small relation to the involvement of their parents (Fan & Chen, 2001b), despite the literature that reports some kind of relationship between the two (Hill & Tyson, 2009). Thus, this study hypothesised that the unknown would be causing anxiety to the involved parents.

Research Gaps

Although perhaps not yet apparent, research is mostly being conducted on the topic in a limited amount of countries, communities, and societies. Thus, it is important to note that due to its inherent cultural, religious and other influences, it is unclear how parental involvement works or even means for different people in societies that do not follow the traditional west way of life. Research has not been done in identifying what exactly constitutes parental involvement and even where it has been conducted it is always through self-reports of the parents.

It is paramount to remember as well that children's feelings regarding the way and the amount their parents are involved has also not been researched. This is mentioned because highlighting how one child, due to his or her character, may or may not react, benefit or get hindered by the aforementioned involvement, does not mean that the next one will have the same experience. What this means is that despite the amount of research been done on how parental involvement affects the grades of children, qualitative research from the side of the children (as well as quantitative as mentioned beforehand regarding other fields) has not been conducted.

Aims

The aim of this study is to investigate the potential result of anxiety in parents that would be procured by their involvement in their children's common affairs. The researcher aimed to investigate (a) the potential correlation between the intensity of parental involvement and parental anxiety, (b) compare the two genders in their induced anxiety resulting from their parental involvement, (c) draw connections between the gender of the parent and parental involvement levels.

Hypotheses

The main hypotheses of the study naturally emerged in (a) higher parental involvement levels predicting higher anxiety ones for both genders, (b) there will be some difference between the levels of parental anxiety produced between the two genders, (c) gender would play a role in how much involved the parent would be with their child.

Method**Participants**

Questionnaires were randomly given along with a consent form to 300 parents with children aged 12 to 14 years in a middle-level (Greek school name is Gymnasium) school. The questionnaires were returned by a hundred and fifteen (115) participants resulting in a response rate of 38.33%. Sixty-eight (68) of them were female and forty-seven (47) were male. The participants' mean age was forty-four (44). All of them Greeks and parents of at least one child. They all lived, at the time of the study, in the general vicinity of the city of Thessaloniki, Greece and more specifically in the municipality of 'Eleftherio Kordelio'. The area is generally regarded as an area in which people have a medium to low socio-economic status, although there is no on

hand data to prove that point. Participation was voluntary and the participants were not given a specific incentive to participate.

Materials

There were two (2) questionnaires used in the study. The first was ‘The Parental Involvement Scale’ (Mji & Mbinda, 2005) in order to measure parental involvement and was translated to Greek under the guidance of a professional translator and Greek professors that are active and teach in the respective level of the middle school chosen, but different schools from the one chosen. The specific questionnaire was chosen because it enjoys popularity amongst researchers (Amponsah, Milledzi, Ampofo, & Gyambrab, 2018; Neiemeyer A.E., Wong M.M., 2009). It consists of forty (40) items which measure parental involvement at both the home (e.g. working with the child on homework) and school grounds (e.g. school meetings & parents’ committees). A few sample questions include ‘I help my child with his/her homework’, ‘I go through his/her tests when at home’ and ‘I buy books as gifts for my child’. The questionnaire used a Likert Scale, ranging from 0 (for ‘Never’) to 4 (‘Always’) and the remaining numbers were standing for 1 = ‘Rarely’, 2 = ‘Sometimes and 3 = ‘Often’.

The second questionnaire dealt with Parental Anxiety and was the ‘Parental Anxiety Questionnaire’ (Ostberg & Hagekull, 2001; Ostberg, Hagekull, & Wettergren, 1997) which consisted of thirty-four (34) items and was also translated in Greek in the same manner. This one includes five (5) subscales which in order of being presented are parental inability, parenthood limiting the parent’s previous social roles, parental social exclusion plus marital and health problems. The scales respectively consist of eleven (11), seven (7), seven (7), five (5) and four (4) questions. A Likert scale is also used in this questionnaire, but it ranges from one (1) to five (5) and the corresponding statements for the numbers mentioned range from ‘I absolutely

disagree' to 'I absolutely agree'. Some sample questions from the questionnaire include 'I have no time for my personal life' and 'I have more social contacts now, because of my child'.

Both questionnaires were the subject of scrutiny in a pilot study that aimed to check whether the language potentially changed or otherwise altered the meaning of the questions. It was proved, after some corrections, that all items were fully understandable and void of misunderstanding potential.

Lastly, Cronbach's alpha (α) was checked on the translated work, resulting in $\alpha = 0.825$ for the Parental Involvement scale, $\alpha = 0.655$ for the inability sub-scale, $\alpha = 0.821$ for the exclusion sub-scale, $\alpha = 0.595$ for the limiting of roles sub-scale, $\alpha = 0.583$ for the marital problems sub-scale and $\alpha = 0.707$ for the health sub-scale.

Procedure

Questionnaires were handed directly to the parents after asking them if they wanted to participate and been given the consent form to fill out along with the questionnaires. Some parents filled the questionnaires immediately, in the presence of the researcher and others took it with them to complete it at home and returned it later. Following the advice of the supervisor, the questionnaires along with the consent forms were sealed inside a small envelope to protect children from accidentally reading through the answers the parents would potentially provide at home, lest the questionnaires were just laid off somewhere accessible in the house, before taken back to the writer.

An explanatory note was also included in the envelope, providing a small amount of guidance and a short explanation for people that potentially had never taken up a questionnaire, also explaining that they could withdraw at any point and that the results were confidential, in addition to the same alerts being provided in the consent form. The process is not an

experimental design as neither the independent, nor the dependent variable cannot be and were not manipulated by the researcher. Rather, the entirety of it could be described of the cross-sectional type since there was only one passing of the questionnaires and uses within subjects design.

Design & Statistical Analyses

The data were processed and analysed using IBM SPSS Statistical Software, version 24 (IBM Corp., 2016). First, a regression analysis was enacted to check on potential correlations between parental involvement and anxiety. Afterwards followed an independent samples t-test to check on how the two genders fared with anxiety. Lastly, an one-way ANOVA was conducted to check on differences between the two genders on how they scored on parental involvement levels and another regression was used to gauge how gender may affect the level of involvement of a parent.

A regression analysis was used to link parental involvement and parental anxiety and showcase a potential correlation between the two. Separate Pearson's correlations were also used to extract potential correlations between the individual variables that measured parental involvement via the questionnaires and parental anxiety. A t-test was also conducted along with the regression to look for potential relationships between the different measured variables mentioned in the previous parts of the Method section.

Lastly, numerous other correlation tests checked on each sub-variable of parental anxiety, namely parental inability, parental social limitations and social exclusion, and parental health & marital problems and associations were attempted to be drawn between gender, age and the just mentioned variables.

Ethical Considerations

The present study was conducted in full agreement and faith in the Swedish Law on Ethics of Research Involving Humans (SFS 2003: 460). Additionally, and since the research was conducted in Greece, the researcher sought out and followed the doctrines and articles contained in the “Code of Deontology in Research” (APTH Research Committee, 2010) as compiled by the Aristotle University of Thessaloniki’s research committee.

The data were collected anonymously and treated as per the law for General Data Protection Regulation that is in place for the European Union. In detail, they were stored in a password-protected and safe computer that could also be only found in a locked room or safe, as ordained by the aforementioned law, Regulation 2016/679.

The anxiety questionnaires were handed in a pre-stamped envelope for as to not have the children accidentally read their contents. However, the nature of the study was not deemed dangerous enough to warrant extra guidelines directed to the participants (parents). It was concluded by the researcher, after a small pilot study, that including debriefings for the parents would actually do more harm than good in this case.

Results

Before proceeding with the data analysis in SPSS, the acquired data were probed upon for potential outliers. There were two of them in the parental anxiety variable that were found to be more than 1,5 box-lengths outside the edge of the procured boxplot’s box, but they were not found to be extreme after further inspection and were thus kept in the following analysis. Three were also found to be outside the boxplot’s box in the sub-variable of health problems in the parental anxiety questionnaire but were also not found to be extreme as well. Three more were

spotted in the variable of marital problems, but again, they were not found to be extreme.

Furthermore, no other outliers were found in the other variables' data.

Hypothesis 1

A regression was used to highlight the potential effect of parental involvement on parental anxiety. There was no significant result found as the variable did not predict the other and no statistically significant result was found in the first explaining the second $R^2 = .03$, $F(7, 107) = .542$, $p < .801$.

Additionally, a Spearman's Rank-Order Correlation test was run to detect the potential strength and direction of association that may exist between the two, but that also proved not statistically significant ($r_s(113) = -.16$, $p = .086$).

Hypothesis 2

A regression was used to detect the potential effect gender may have on the levels of parental anxiety, but the results were not found to be statistically significant or otherwise notable in effect.

Table 1

Regression Table for P. Anxiety & Gender.

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2.668	.118		22.563	.000		
	Gender	-.089	.079	-.106	-1.128	.262	1.000	1.000

Note. R Square Adjusted = 0.02. CI = confidence interval for B.

Hypothesis 3

In the same vein, gender was probed for a potential effect on the level of parental involvement, but the results were not significant or otherwise notable in effect either.

Additional Tests

Further tests resulted in finding no significant associations between parental involvement and parental anxiety, nor between any variables such as age, sex and all other sub-variables like parental inability, parental health, parental marital problems, parental social limitation, and parental social exclusion.

Worth mentioning is that the reliability of the scales was found to be generally high (Cronbach's Alpha = .793) and, after running the required tests, there were no items that would considerably improve the general reliability enough with their removal.

Discussion

Three hypotheses were constructed to pinpoint the aim of this study regarding parental involvement and parental anxiety: (1) that parental involvement higher levels would predict higher levels of parental anxiety, (2) that gender would explain variance with the different levels of parental involvement (and thus potentially highlight in order a greater need for psychological service on the mothers' part), (3) gender would predict parental anxiety itself, further emphasizing the struggle of being a parent if female, something that traditionally seems to be true and is generally confirmed in research (Östberg, Hagekull, & Wettergren, 2002). The results did not provide any support to any of the three hypotheses made in this study, despite their overall good reliability as shown by the score of their Cronbach's alpha value.

None of the predictors managed to produce any kind of relationship, nor a correlation in further tests nor did any of the sub-variables of parental involvement and parental anxiety in relation to gender or in between them.

The main variables of the study

Parental Involvement

The lack of research on the relationship between these two allows little discussion on the topic of how these two could be related and further potentially linked. One aspect of parental involvement is time spent with one's child, either in leisure or educational activities (having fun and studying with one's child respectively). In addition, time spent with children is directly positively related and proportional to the amount of earnings a parent is making and that effect is generally found to be a world-wide one (Guryan et al., 2008) and according to the same study, this relationship's positive gradient is found to be analogically negative when using earnings and education on the part of the parent to predict leisure time spent with one's child.

Seeing as the area of Greece that this study was conducted in is generally considered a rather mediocre to poor income area (although no statistical data exist to support such a claim) and it is locally considered as a "not very good" area of the city, might help one explain how this might have played a role in the average score for parental involvement reported ($M = 2,86$) and perhaps more importantly, the absolute absence of no high scores with the max score noted not even reaching four out of the five in the Likert Scale used for the questionnaire. What arises as a conclusion for future parental involvement measurements would be to ask the participants about their time spent with their children in the last weeks or so, to get a clearer picture and a better check towards the actual levels of parental involvement, since Greek parents seem to have some differences in their parenting style when compared to others (Koutrouba, Antonopoulou, Tsitsas,

& Zenakou, 2009; Mylonakou & Kekes, 2007). Additionally, since time spent with one's children is found to be more valuable for parents that have a higher opportunity cost when spending time with them (Guryan et al., 2008), a more mixed area in terms of socio-economic levels would perhaps be better suited to conduct such a study, especially since parental education level is found to be a major predictor in how much time mothers especially invest in studying with their children (Deslandes & Bertrand, 2004; Hill & Tyson, 2009; Hoover-Dempsey et al., 2001).

One aspect of the participants that might have produced the aforementioned results in the measurement of parental involvement could lie in the parents' school culture and the schools' effectiveness in the country. Greek teachers report a low attendance rate from the part of the parents when it comes to them getting information and updates on their children's school progress (Koutrouba et al., 2009; Mylonakou & Kekes, 2007). Being careful is important here, as this does not necessarily mean that there is an issue with the parental school culture, but rather the questionnaire used in this study which measured involvement based on things exactly like school meetings' parental attendance. This is a factor that can potentially have had the results muddled in a way that would lead to conclusions such as the non-significant ones observed in the study's results.

Parental Anxiety

This factor was found to be even lower overall for the participants ($M = 2,54$) and with an even lower maximum value. This is mentioned, because again, if one considers the previous points about how the socio-economic general level of the area accessed for the carrying out of this study, lower education levels and low-medium to small income levels would lead to smaller time-frames of parental involvement. If the supposed connection between the two variables

(parental involvement and parental anxiety) holds true despite this study's findings, it would only be natural to find no such connection in a sample with these characteristics.

Additionally, concerns have been raised in part of the researcher for the very questionnaire used to measure parental anxiety in this study. While the questionnaire itself is reliable and measures anxiety levels in parents, this perhaps was not the correct choice of a questionnaire to administer for this type of study and concerning what was being investigated. This is because the questionnaire measures the variable by allocating the sources of parental anxiety to factors such as the person's health (like feeling more tired than before), social exclusion due to having children and other aspects that do not touch as closely and properly as the researcher would want to examine the causes of parental anxiety. What this would mean is that the questionnaire measures anxiety of a person that just happens to be a parent, because it tackles and sheds light only on issues surrounding the fact and caused by the presence of a child (like having less time to spend with one's loved one because of the needs of the couple's child) and not the levels of anxiety of a parent that is fully engaged in their role and examining anxiety caused by the actions and distance travelled for the child. This of course is a difficult point to address since it is already mentioned that parents do not choose their parental involvement level (Avvisati et al., 2010) and participants that would volunteer and participate in such a study could be hypothesised to be already motivated enough as parents to do so.

Studying Parental Involvement

This study has highlighted an important issue from the researcher's point of view: parental involvement needs to be studied in a different manner than just from the academic results of the children, which is the main way of measuring it.

With that said, it is highly difficult, impractical and definitely questionable to do so, since examining other potential benefits or consequences of the effects of parental involvement would most likely require longitudinal studies that would last years and close, uncomfortable monitoring of parents' and their children's behaviour for a considerable amount of their personal time.

It is also difficult to draw general conclusions for parental involvement from the viewpoint of psychology as a science, or more specifically make general recommendations as professionals to parents (Gunnarsdottir, Njardvik, Olafsdottir, Craighead, & Bjarnason, 2011). Specific problems require specific solutions and while psychologists can start their work in counselling using a general frame of theory and knowledge acquired from studies, this is definitely not enough, as different parents use different methods for parenting that work differently for each child (Wagner & Sconyers, 1996). Even the perceptions of how much sacrifice each parent goes through and how different in volume they are between the child's and the parents' on their own sacrifices has been shown to lead to different results including complete failure and rejection of any kind of motivation for schooling (Leung & Shek, 2015). The only viable and ethical way to approach and help families, parents and their children would be with a strong, stable and consistent counselling schedule that would take individual differences into account, as well as culture, religion and every social aspect that is relevant to the sessions.

Strengths and Limitations

Strengths

This study is characterised by a fair amount of strengths overall. The first and perhaps the strongest one is the number of participants that numbered a hundred and fifteen (115), allowing for accuracy of results and statistical reliability as well as a great amount of statistical power.

That power is not a minus in the study's validity. The great struggle earlier in this study was the decision of running a linear or an ordinal logistic regression, since the literature is still heavily debating on the nature of the Likert Scale being ordinal or continuous. Both were ran and neither produced results of statistical significance in the end and their results differed so little that only one of them was reported.

The second is observed in the inclusion of every parent that was interested in participating that had their child attend the middle school approached, regardless of their country of origin. By doing that, a better picture was estimated to have been procured for the situation in the Greek school which always includes students with origins other than just Greek.

Thirdly, the questionnaires being translated from English to Greek and then ran through a pilot study ensured the high reliability of the scales used and made them more pragmatic since Greek culture, language and the Greek school's peculiarities in terms of its constitutions that make and characterise it were taken into full account with the assistance of active, on duty professors in other middle schools in the country. This is believed to have led to a smaller drop-out rate than usual, as anecdotally noted from the comments received on questionnaire return. Additionally, the scales were chosen not only because they are considered by the literature to be reliable and generally robust, but also because they are deemed to be widely applicable to a different and diverse cultural array of participants (Amponsah et al., 2018; Neiemeyer A.E., Wong M.M., 2009). Extra care was taken to ensure that the items would be fully understandable by every parent, regardless of their educational level.

Limitations

The first limitation that needs to be mentioned is that convenience sampling was used for recruiting its participants. The school was accessible to the researcher and the personnel

contacted was happy to collaborate and move the legal strings necessary to distribute the questionnaires, thus perhaps producing a not-so representative sample of the general population.

One of the major blind spots of this study is that parents do not randomly choose their level of parental involvement, meaning that parents' involvement is mostly a result of who they are as people and less about what they do (Levine, 2006). In addition, schools and other institutions do not randomly select parents to participate in certain parental activities that have to do with the children's schooling (Avvisati et al., 2010). This ultimately means that children's academic output and the activities undertaken by their parents need not be causal at all (Green et al., 2007). Consequently, parents and their feelings about their engagement are not random and the famous saying made subheading in the introduction, "It isn't much about what you *do* as a parent; It's who you are" (Levine, 2006) rang true when the results of the study were in. This is highlighted in the extra 4.5 extra hours highly educated mothers spend for their children's homework in contrast to mothers that are not as highly educated (Guryan et al., 2008). This well-observed relationship holds true across both genders and through all educational levels, even for travelling to assist students and it is striking when it is also observed that these parents are also out of the home often.

Additionally, asking the participants in written format about their personal state of life might have alarmed and made them answer differently, creating a bias towards presenting themselves in a better light than what truly was happening, as one can perhaps conclude from the generally low mean scores of parental anxiety.

Future Studies

Should focus on developing a better instrument for measuring parental anxiety, and not anxiety of a man or a woman that simply happens to be a parent. It is very true that the second

category is characterised by aspect of life that others are not, but it is also true that assigning a specific identity to oneself such as that of a parent is followed by specific motivations (McKechnie et al., 2016). A man or a woman that have a child may biologically and, in some level, socially parents, but it is a different thing to ordain one's life as a parent first and everything else second and third.

To do that though, one would need to first investigate and create an instrument on the level or very existence of parental feeling of duty. To the best of the researcher's knowledge and library search skills, there is no such literature yet.

Another gap in the literature lies in the cultural background's effects on parental involvement style. There are very few papers published over the decades specifically for the Greek school system and Greek parents (Koutrouba et al., 2009; Mylonakou & Kekes, 2007) and the level on which the studies are carried out are still in trying to identify perceptions of parents and teachers about parental involvement, further reinforcing the belief that Greek society is still very protective of their way of parenting, despite findings of Greek fathers' enormous positive effect on self-esteem and various others aspects of life for their children (Antonopoulou, Alexopoulos, & Maridaki-Kassotaki, 2012) and Greek mothers' comparatively bigger warmth than mothers of other cultures (Keller et al., 2003). Future studies should focus more on what these parents do and how they do it, before advancing towards the potential negative effects for themselves, this study attempted to find.

Summary and Concluding Discussion

As noted in the previous sections of the study, no significant results were found that would link the variables examined in the study. The reasons, although one can only begin to guess, are somewhat previously mentioned in the introduction of the study. Firstly though, the

most important part of why, would perhaps be that parents report that spending time with their children while they are involved with their homework is actually fun (Guryan et al., 2008).

Crucial is the fact that parents who are unemployed do not spend considerably more time with their children than working parents and the difference that does exist does not in any way compare to the working hours devoted by the working parents (Bianchi, 2000; Sayer, Gauthier, & Furstenberg, 2004). It would then be more appropriate and logical to assume that time not spend with children could potentially lead to parental anxiety, if the parent in question is in any way invested in his or hers child's academic, emotional and other progress in life.

On a more specific note, the issue of culture arises naturally in this study. Since all the parents questioned had their children enrolled in a Greek school and the questionnaires were administered in the Greek language, the participating parents were at least fluent in the language, and most, if not all, of them nationally Greek. There are sadly no studies that involve the different perceptions on parental involvement from the perspective of parents, but this phenomenon, meaning parents understanding their role in involving themselves with their children's education and general evolution has certainly been observed before between Asian – Americans and other descends of Americans in the country of the United States, as well as between the West and the East. This is all despite the fact that more than 98% of teachers in the country of Greece believe that a teacher-parent co-operation is “very important” or “fairly important” (Koutrouba et al., 2009), but only half of the parents seem to attend the programmed meetings of the school for their children, although this could be explained by having one of the parents of a child attend instead of both. That would though be only anecdotal since there is no data on it. The reasons for as to why teachers believe that parental involvement is important are listed with “understanding the pupil's need” as their first reason (Koutrouba et al., 2009) and

building on that, other pieces of research have highlighted the relationship between the parent and the teacher as a profound factor that helps the child build character and strength, fight against its weaknesses and achieve its goals (Mylonakou & Kekes, 2007).

Despite the parents finding common ground intra and cross background, children seem to be affected differently from the various styles of parental involvement (Coleman, 1987; Day, 2013; Krueger et al., 2009). It could be said that Greek children benefit differently or not at all from the Greek style of parental involvement, but evidence would be required to back up this claim. Ultimately, more research is needed into exploring Greek parental involvement styles and how the children's emotional and academic achievements reflect on that. All in all, a more correct title for this study would be "Does an increased feeling of parental duty predict parental anxiety?".

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Tables

Table 1

Regression Table for P. Anxiety & Gender.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.668	.118		22.563	.000		
	Gender	-.089	.079	-.106	-1.128	.262	1.000	1.000

Note. R Square Adjusted = 0.02. CI = confidence interval for B.